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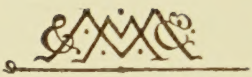

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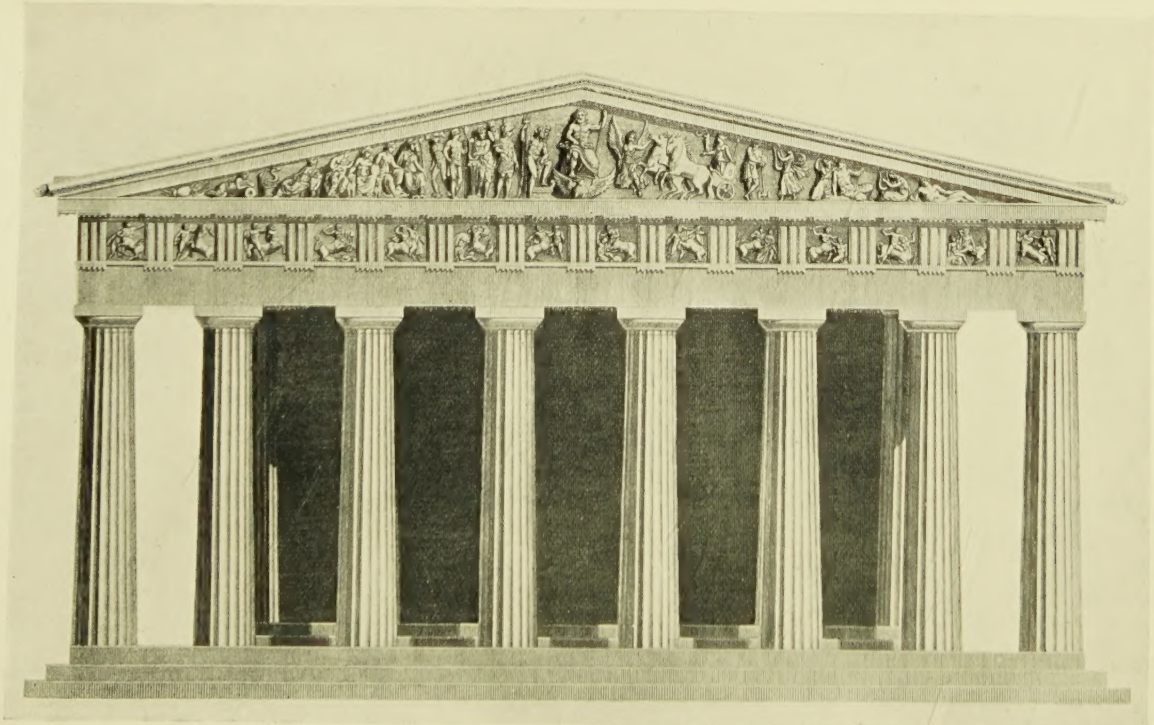

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THE PARTHENON.

NOTTINGHAM SCHOOL OF ART

ARCHITECTURE

BY

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PREFACE

THE following pages were written by the Author during his last illness, and finished only a month before his death. Although he had made arrangements for its publication, he was unfortunately not able to read the proofs or take any part in the actual production of the book. This task was delegated to me, and in doing it I have had the assistance of Mr. George Horner, a friend of my father, who, besides reading the proofs, has compiled the index and contributed many valuable suggestions.

I wish to thank the Cambridge University Press for their kindness in allowing many of the illustrations to be reproduced which had previously appeared in the Author's larger work on the history of Architecture published by them, for the reading of which it is hoped that this volume may act as an incentive.

I also wish to thank Mr. John Murray, Messrs. B. T. Batsford, Ltd., the proprietors of *The Builder*, *The Building News*, *The Architect*, and *Country Life*, for leave to reproduce other illustrations, and, finally, Messrs. Macmillan & Co. for their careful production of the book.

B. H. JACKSON.

March 6, 1925.

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INTRODUCTION

Architecture—what is it ?

One may ask the same question of poetry, and find it equally hard to answer.

Architecture is based on building, as poetry may in a manner be said to be based on prose. But Architecture is something more than building, and poetry something more than prose. What is it in each case that is added to make the difference ?

I remember Dr. Jowett, the Master of Balliol, once citing to me what he said was Ruskin's definition of Architecture. It was to this effect : " So we see that architecture is nothing but ornament added to building ".

The Master quoted from memory, and could not give the reference : I can only hope for Ruskin's sake that he was mistaken ; for though this definition has been widely held and may satisfy many who ought to know better, it embodies the most mischievous fallacy by which the proper understanding of the subject has ever been perverted. Even Fergusson, though with some qualification, commits himself to the statement that " Architecture commences when some embellishment is added to the building which was not strictly a structural necessity ".[1] As well might it be said that prose passes into poetry with the introduction of metre and verse, though the magnificent rhapsodies of Job and Isaiah teach us that the highest qualities of poetry may be reached without either. In the same way some of the sublimest works of Architecture have either no ornament at all, or only such as is of the simplest and most abstract kind.

[1] *History of Ancient and Mediæval Architecture*, vol. i., Introduction.

Vitruvius, or the author of the book *De architectura* that goes by his name, begins his treatise with an attempted definition of his subject. " Architecture ", he says, is a science involving much " discipline ", or mental training, and deep knowledge of various kinds, so that by its judgment all work done by the other arts have to be tried and approved.

This claims for Architecture that it is the master-art which governs all subsidiary work ; and he goes on to tell us that it springs from two elements, *fabrica et ratiocinatio*, that is to say, a knowledge of practical building work, and the application thereto of Reasoning. Both of these, he continues, are equally necessary and essential. Architects who have worked without the aid of culture and letters, however well skilled they may be in handicrafts, have not been able to confer any authority on their labours, while those who have trusted only to reasoning and theory seem to have been following a shadow and not a reality. Those, however, who have studied and mastered both methods, like men completely armed, attain their proposed object more rapidly, and with authority. The " true architect needs both native talent and readiness to learn ; for neither genius without what he calls discipline, nor discipline without genius, will make the perfect artist ". He might have quoted Horace[1] :

> Ego nec studium sine divite venâ,
> nec rude quid prosit video ingenium.

The " discipline " of Vitruvius is to include skill in drawing, in geometry, in arithmetic, some knowledge of optics, a wide acquaintance with history, and a diligent study of philosophy ; but when he goes on to add to these subjects music, medicine, legal practice, astrology, and astronomy, we begin to wonder whether we are listening to a practical architect or to a literary pedant.

Leaving, however, these extraneous subjects in the better-qualified hands of the philosopher, the musician, the doctor, the lawyer, and the specialist, there remains to be considered the definition of Architecture as knowledge

[1] *A.P.* 409.

of the building craft, corrected and directed by reason and study, or what Vitruvius calls "discipline"; in other words, practice, supported and guided by theory. This combination it is, he says, which makes the difference between mere building and architecture. Let us consider it.

Take, in the first place, building in its simplest form. The barbarian, when he has got beyond constructing his hut of timber and wattle, encloses it with walls of rude masonry, through which he leaves or forms square-cut openings for exit and entrance and for light: perhaps he carries his eaves in front on isolated piers of rough stonework. Experience teaches him the awkwardness of his square angles, and suggests that he would obviously get round the piers more readily, and that they would take up less room, if he knocked the corners off. Reason comes to his aid; the awkward angles are splayed off, and the square pier becomes, in a rude fashion, a column. By this simple change the barbarian, without knowing it, has effected a revolution. He has passed from building to architecture. He will no longer go on building square piers, but build them round from the first; the precursors of the mighty colonnades of Luxor, of the massy Doric pillars of Paestum, of Syracuse and Selinus, and the perfect grace of the peristyle of the Parthenon.

What has the barbarian done to make this transition from mere building to architecture? What has he added? Certainly not ornament. He has added an idea; he has brought Reason to bear upon practice, and this influence once begun, and carried on with advancing skill, is the secret of all that followed.

This simple example of the beginning of Architecture in its humblest form may serve to illustrate a great truth that should never be lost sight of in tracing the history of the art in its progress from style to style. It is this: that all the great changes through which Architecture passed successively may, as a rule, be found to have originated in suggestions of utility and convenience. But something more was needed to work upon these suggestions. The barbarian, by raising building into Architecture, has

raised it into the category of Art, and here we enter the sphere of æsthetics. The æsthetic sense, the love of beauty, is innate in man, and the barbarian, pleased with the convenience of what he had done, soon began to take a different kind of pleasure in it, and to find that his column not only had practical advantages, but was more agreeable to look at. Features demanded by the construction lent themselves to further design ; the flat slab or abacus to the round shaft needed to carry the square wall above invited a shapely treatment, and was developed with the capital, and a similar expansion at the foot into the base. Here we have in fact the rudiments of the Classic " order ". Thus far the art has progressed without any question of the introduction of ornament.

Let us take another instance of the development of primitive architecture, from the rude cromlech or simple circle to the megaliths of Avebury or Salisbury Plain ; from the Grey Wethers of Dartmoor, and the Merry Maidens of Cornwall, from Addington and the Rollright Stones, to the long-drawn avenues of Carnac in Brittany and the vast trilithons of Stonehenge within their circles of piers and lintels artfully framed together. Here Reason plays her part unmistakably : geometry was needed to set the work out ; astronomy, we are told, gave the direction ; and the mechanical skill that was needed to raise and frame together these great monoliths with the humble appliances of prehistoric times fills us with astonishment, and its explanation defies conjecture. The builders of Stonehenge must have felt they were doing a fine thing : one that made full demand upon their intelligence, one that was built for all time, and one in which their memory would be preserved for ever. Here we have simple building construction raised by reason, by science, into an art, in fact into Architecture ; but there is no question of the introduction of ornament having played any part in the change.

The resources of the decorative arts, however, were ready waiting for adoption by the architect to embellish his more severe and monumental work, though they played no part in its development. The ornamental arts of

painting and sculpture preceded that of Architecture. The æsthetic sense shows itself in the earliest human work, and among the rudest people. Palæolithic man, before ever he learned to build at all, decorated the walls of his cave with drawings of animals and foliage, and the constructor of the chambered tumuli scratched on the flat stones with which he lined his cells and passages, scrolls and spirals often of great beauty. Stonehenge itself may very likely have been decorated with painting, of which weather during countless ages of neglect has effaced all traces. The early artists of Egypt seized eagerly on the blank walls of tomb and temple as a field for their hieroglyphics, which were as eagerly adopted by the architect to give beauty and religious and historical significance to his work. This surface decoration, however, had no influence on the architecture.

But the same æsthetic passion that inspired the decorator fired the architect as the necessities of construction and convenience demanded new features, and novel details and fresh additions to his simple building. These he now considered not merely as practical structural features, for purpose of utility, but as matters which being always before his eyes were capable of giving pleasure or the reverse, according as they satisfied his æsthetic sense or not. The cornices that appeared over the doorways were projected in graceful curves ; the huge pylons that rose at the entrance of the sacred enclosures were proportioned agreeably and tapered as they rose ; the kindred art of sculpture was combined with architecture ; capitals took new forms and were modelled to suit the light they received, and the vast columnar halls of Carnac and Luxor arose to astonish the world.

Thus Architecture was developed from structural necessities and suggestions, not by addition of ornament to structural form, as some would have it, but by bending the structural forms themselves into forms of beauty. Architecture is construction, but it is construction inspired by a new spirit. It implies an artistic sense and aspiration in the constructor as well as practical skill ; it requires this in the nation as well as in the individual

artist. Except from a people imbued with this sense, and inspired by this aspiration, it would be in vain to look for Architecture. It is like the difference in which a simple act of courtesy will be performed by two different men in social life. One will do it gracefully, the other clumsily and awkwardly. So two workmen will do the same thing, but will do it in a different way. The work of both may be useful and serviceable, but that of one will show thought and imagination, suggestive of further progress ; that of the other will be correct, but dull and commonplace, leading no further. The one man is an artist, the other a mere mechanic. So one nation will go on building in the same way without promise of further development, while another will from the first show signs of growth, of discontent with imperfection, of constant grasping at improvement. The one nation is artistic, alive, progressive, the other is stagnant and lifeless. It is like the way in which two men will tell the same story : the one by a bare, dry recital of facts, the other with fire and action, so as to bring the scene before your eyes and make it real. One is the mere formal record of the chronicler, the other may soar into the heights of poesy. So do we have side by side the prose account of the battle of the Kishon, and the magnificent poetical pæan of Deborah, the wife of Lapidoth, rejoicing in the loftiest tragic vein over the downfall of the great enemy of her race.

This is Architecture, as contrasted with mere construction ; and when Architecture called in the aid of the decorative arts of painting and sculpture, they were employed not on mere ornamental additions, but on constructive features, the metopes and the frieze of the great Doric temples. Nowhere did Architecture declare her independence of ornament more vigorously than in the Cistercian buildings of the twelfth and thirteenth centuries. By the rules of that stern order ornament was absolutely forbidden. There was to be neither painting nor sculpture ; the glass was to be white, without cross or ornament, and the bell-tower was to be low and unostentatious. Like the Mussulman, the Cistercian artist was deprived

of the use of natural ornament. At the most he could temper the dry severity of the arches of door and window by moulding the edges ; and abroad, where moulding was less in fashion than with us, as for instance in Burgundy, in such churches as that at Pontigny, there was but little of that. But notwithstanding this prohibition, the Cistercian has shown us that he could dispense with ornament, and wanted nothing but nicety of proportion, dignity of scale, graceful outline in the forms of his construction, to enable him to reach the highest level in his art. The Yorkshire abbeys are mostly Cistercian, and are among the loveliest buildings and the stateliest that have come down to us from the Middle Ages.

To return to our definitions. What is Architecture ? It is clear that the first definition which makes Architecture nothing but building improved by ornament will not do, for ornament is not essential. Architecture does not consist in beautifying building but, on the contrary, in building beautifully, which is quite another thing.

The construction itself must be beautiful, irrespective of all ornament. To the definition of Architecture by Vitruvius, as Building guided and directed by Reason, we only want to add the condition of beauty, and the inclusion of the æsthetic sense within the realm of Reason. As prose rises into poetry by the greater elevation of thought, the finer flow of language, the touch of sympathy, grace, and pathos, so does Building pass into Architecture with the superior grace of the main forms of the fabric, perfect expression of the conditions of the construction, and closer harmony between purpose and achievement.

In a word—Architecture is the poetry of construction.

CHAPTER I

EARLY GREEK ARCHITECTURE

EUROPEAN Architecture, of which it is the purpose of the following pages to treat, practically begins in Greece. It is influenced and partly based on the great styles of the older world, of Egypt, of Chaldea, of Assyria, of Persia, but it would be idle to attempt within the compass of this volume to do more than touch them

Greece.

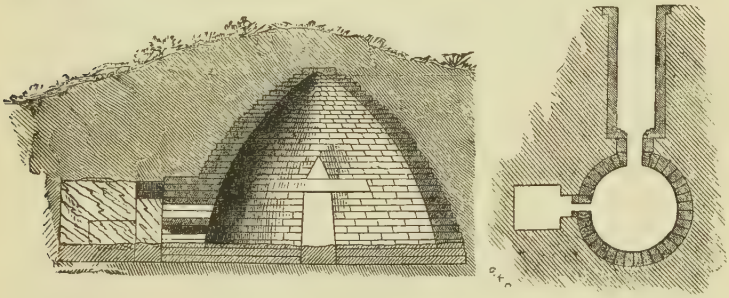


FIG. 1.

at those points where they come in contact with European art. Each of these great styles needs a volume or volumes to itself.

When we first find monuments of Architecture in Greece, we are still in the Homeric age: in the age of bronze, in the pre-Hellenic period which for want of a better name has been called Pelasgic, ranging probably up to as late a date as 1100 B.C. We can still stand under the stone dome of the treasury or tomb of Atreus (Fig. 1) and gaze on the megalithic gateway

The Homeric age.

of Mycenae with the mystic lions in the tympanum above (Plate I.). It is the time of the Atridae, and Mycenae is the chief city of Greece. Excavations of palaces there, at Tiryns, and at Troy—for the Trojans and Greeks seem to have been kindred people, speaking one language, and sharing the same civilization—bear out Homer's pictures of the homes of the Grecian princes and their domestic arrangements. The discoveries of Sir Arthur Evans in Crete reveal a Minoan civilization of a very early type. The palaces are planned on a magnificent scale. Through spacious paved courtyards you reach the hall, the *μέγαρον*, where the poet makes the visitor discover the lord of the house, Nestor, Menelaus, or Alcinous, feasting in the midst of his family and retainers. Another hall, with its own courtyard and adjuncts, is devoted to the lady of the house and her attendants. There are upper storeys reached by stone staircases, and a world of offices, and store chambers, of which we can only guess the purpose. The rooms are described as gorgeously furnished. "Tell me," whispers Telemachus to his companion, Nestor's son,[1] in the house of Menelaus at Lacedaemon, "can the house of Zeus in Olympus equal the blaze of bronze under these echoing roofs, with this display of amber, and gold, and silver, and ivory: reverence seizes me as I behold it." Menelaus, overhearing, deprecates comparison with the Gods, and explains his collection by his eight-years wandering in Cyprus, and among Phoenicians, Egyptians, Ethiopians, Sidonians, and in Libya. Still greater splendours dazzle Ulysses at the gate of Alcinous, where walls plated with bronze, and golden doors on pivots of silver in cills of bronze, reflect the glory as it were of sun or moon.[2] The metal wall-linings were derived from the East, and suggest that the upper part of the walls was of wood, as it was undoubtedly in the palaces of Nineveh and Persepolis, above the lower stage of sculptured slabs. But it appears that the stone-built treasury of Atreus was lined with metal plaques, for attaching

The Homeric palace.

Plan of the Homeric palace.

The metal work.

[1] *Odyssey* Δ 69. [2] *Odyssey* H 85, etc.

[*Photo, British School at Athens.*

LION GATE AT MYCENAE.

To face page 2.

which the pin-holes, and I believe some of the metal pins, still remain. The upper part of the walls of Solomon's palace at Jerusalem, which belongs to this period, were, Josephus tells us, of wood; and the work was of Phoenician origin, for Solomon engaged the help and services of Tyrian workmen. "Thou knowest", said Solomon when engaging with Hiram, king of Tyre, "that there is not among us any that can skill to hew timber like unto the Sidonians."[1] A great part of the description of the work for the temple and for Solomon's palace is occupied with the bronze castings of the Phoenician Hiram,[2] and with the great pillars of bronze, Jachin and Boaz, which he made for the entrance of the Holy House, and which were hung with wreaths of chains of gold carrying golden pomegranates.

Solomon's Temple.

The bronze age, the Pelasgic period, passes away, and but for the spade work of our own time, and the few monuments at Mycenae that have been mentioned, we should have nothing to tell us of it but the Homeric poems. But even in Homer's time it had already gone by, and what he portrays for us is really another world than his own, known to him only by repute, by legend, and by survivals of an old state of society. Iron, if I remember, is only once mentioned in the *Iliad*, and then as a precious metal used for ornament in inlay. The Hellenic race had come down on Northern Greece and become mixed with the Pelasgic population; and by the Dorian invasions, and the return of the Heraclidae *c.* 1100 B.C., a rougher race, less susceptible of artistic feeling, had made itself practically dominant in the Peloponnesus.

The Hellenic age.

At the outset of this new period we are confronted with a new type of Architecture. The religion of the older world was domestic and personal. Fergusson remarks that Homer nowhere mentions a Temple. But with the new settlement of Greece we find that Architecture has become religious. The earliest example is what remains of a temple at Corinth. It is in the Doric style, perfectly developed, though of

The temple. Doric at Corinth.

[1] 1 Kings v. 6.

[2] 1 Kings vii. 15, etc.; 2 Chronicles ii. 11, etc.; iii. etc.

extraordinarily massive and stumpy proportions, the column being less than four times the height of its lowest diameter (Fig. 2).

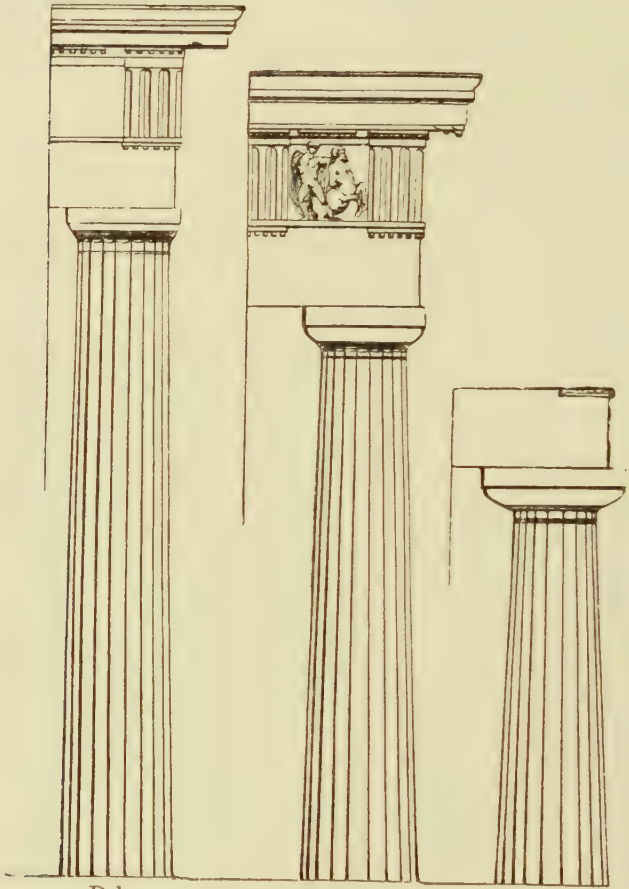


FIG. 2.

The date to which this temple at Corinth is attributed is that of Cypselus, 650 B.C. The Doric style has its

prototype in Egypt at Beni-Hassan, and it is significant that the legendary invasion and settlement of the Egyptian Cecrops in Athens belongs to this period. The history of the preceding four hundred years is a blank, and has given time for the development on well-established lines of the Dorian order of which the temple at Corinth is an early example. Even in that building there are to be found some traces of the refinements which characterize the style at its highest development.

Doric temple at Corinth.

The Doric is the simplest of the Greek orders, and at first sight would seem to require only the simplest treatment. It was therefore a surprise to modern students when it was discovered that in its highest development, at the Parthenon in Athens, it had been treated with an amount of finesse scarcely credible. The purpose of each alteration that was made had been to correct some optical illusion, and to restore to apparent correctness, such as the eye demanded, defects arising from causes of that kind. For instance, a plain cylindrical shaft appeared larger as it rose. It was therefore tapered. It now appeared hollow-sided. To remedy this the outline was made convex, and as a further refinement the curve was made parabolic and its position carefully studied. This *entasis* of the column results in a good and perfect outline, neutralizing all optical illusions and satisfying the eye by deceiving it.

Refinement of Doric architecture.

Again, various devices were resorted to, to correct optical illusions arising from juxtaposition of parallel lines, and the effect of one falling on another at an angle. To remedy this, cornices were slightly curved upwards, as well as stylobates and steps. Again, columns were inclined slightly inwards, and differences in widths of intercolumniations were accurately proportioned. All these refinements were studied and adjusted with the greatest nicety, and were, in fact, only discovered by careful scientific examination in modern times.

These refinements, however, belong to a later age than that of the temple at Corinth, the clumsy proportions of which were soon developed on more graceful lines.

It is remarkable with what persistency the massive Doric order has preserved religiously the tradition of an older construction in timber. The column is the tree carrying the architrave, a beam on which girders rest which lie across the portico; the ends of these girders are represented by the triglyphs, from which guttae [1] depend. These carry the cornice, of which the projecting joists are represented by the modillions. These features, reproduced in stone, were adopted as essential features in the Doric order, which had long done with wood. The wit of man, it would seem, could no further go. To the present day we have them whenever we use the order, though they are to us quite unmeaning and only represent an obsolete form of construction, one that perhaps never existed in that precise form, for there is no reason for such massive timbers as those represented by the triglyphs to cross the very moderate span of the portico.

Reminiscence of wooden construction.

Greek architecture is essentially a columnar style, and the plans of the temples are distinguished by the number of columns in the façade, and their presence or not along the flanks of the temples. Thus a temple is hexastyle or octastyle according as it has six or eight columns in the front; and if the colonnades are continued along the sides it is peripteral. Within this cage of columns is the temple proper, the cella, with its own columnar façade. Round the outside of the cella was a cloistered walk within the peristyle or screen of pillars. The cella was comparatively small and lit only by the doorway, unsuited for congregational gatherings, and therefore seldom converted afterwards to Christian worship, while the peristyle was devoted to processional celebrations, such as the Panathenaic festival at Athens in the Parthenon (Fig. 3).

Greek a columnar style.

The Doric was the favourite order for most of the important temples, and the Greeks took it with them to Sicily and Magna Graecia in Italy, where they built on a magnificent scale. The great temple at Selinus measures about 340 ft. by 165 ft., and that at Agrigentum 360 ft. by 173 ft.

The Doric style.

[1] Representing *drops* of water.

[*From Harris & Angell.*

METOPE FROM THE TEMPLE AT SELINUS.

To face page 7.

Architecture now called in to her aid the kindred art of sculpture, for which the Doric style offered splendid opportunities. It should be observed that the sculpture was bestowed on structural features, so as to combine it with the Architecture and form an essential part of the design, not to be a mere ornamental appendage. So treated, Architecture and Sculpture seem equally part of the Doric style, inseparably united in one general design. The tympanum of the pediment was filled with groups of figures (Frontispiece) fitted to the space ; the metopes or square panels left

Sculpture and architecture.

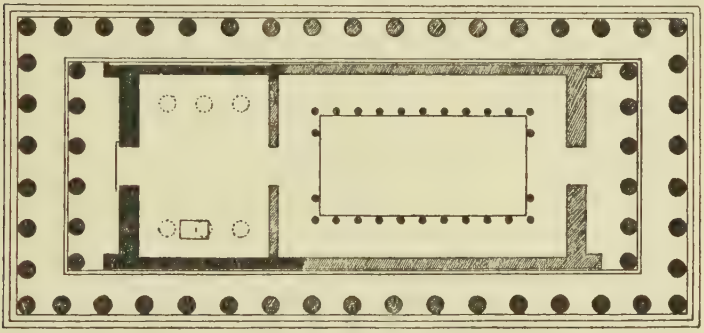


Fig. 3.—The Parthenon.

open in the frieze between the triglyphs were filled with subjects in relief, and a continuous procession of figures filled the frieze round the cella under the peristyle. An early example of sculptured decoration is given in Plate II. showing a metope of the early temple at Selinus in Sicily which is dated about 626 B.C.[1] It represents Perseus beheading the Gorgon, and is barbarous enough, and backward compared with the associated architecture, but it shows life and gives promise

Temple at Selinus.

[1] Harris and Angell, Plate VII. Their Plate V. gives an elevation of the temple. The Medusa metope is now in the museum at Palermo. Other metopes discovered at Selinus, c. 1892, are illustrated in the *Builder* for August 27 in that year. One represents a winged sphinx, another Europa on her bull.

of better achievement to come. Messrs. Harris and Angell give other illustrations from the temples of Selinus showing a more advanced style of sculpture. The head in their Plate V. is very fine,[1] no doubt of a later date, and wears the smile characteristic of Greek sculpture preceding the great period of Pheidias. These early characteristics appear in the fine sculptures of the temple at Egina which dates from late in the sixth century B.C. By this time the arts had advanced rapidly. Under the Peisistratidae and afterwards, Athens had increased in power and wealth, and begun to adorn herself with fine buildings. A great temple was built on the Acropolis to the goddess Athene, which was destroyed by Xerxes at the Persian conquest in 480 B.C. The foundations and parts of the columns can be traced.

Advance of sculpture.

We now come to the wonderful period—little more than a half-century—in which human art may be said to have reached its highest achievements; when Architecture, corrected and improved to the utmost degree of nicety, admitted no further refinement; and when sculpture, triumphing over every difficulty, reached a degree of beauty and perfection that puts nature to shame. Between 470 B.C. and 409 B.C. all those buildings, and all that sculpture which makes Athens the wonder of the world, was finished, besides other work at Olympia of no less excellence. The Parthenon was finished in 438 B.C., the Propylaea was built between 437 and 432, the Erechtheum was finished in 409, and the temple of Zeus at Olympia in 436. Considering the shortness of the time, and the immense amount of work involved, it is obvious there must have been a very large number of consummate artists employed. Ictinus is named as the architect of the Parthenon, but Plutarch says that Pheidias was the supreme director of them all, *πάντων ἐπιστάτης*, and the great chryselephantine statues of Athene in the Parthenon and Zeus at Olympia were by his own hand. In the Zeus of Olympia, the Athene of the Parthenon, and

The great period.

The Parthenon.

Pheidias.

[1] See Plate IV.

the Hera by Polyclitus at Argos, the Greek gave expression to his highest conception of Deity. Asked what ideal he had before he began his Zeus, Pheidias quoted the description of the God at the opening of the *Iliad*. When his statue was done, the story goes that he prayed to the God to give some sign whether he were satisfied with the result of his five years' labours, and that a thunderbolt in answer fell at his feet.

The Parthenon.

There is no reason for dwelling on the wonders of Pheidian art, on the dignity of the Theseus, and the entrancing beauty of the group of the three Fates; they are familiar to all who have any taste for art, and they never tire one. Who does not know the vigorous metopes with the struggles of the Centaurs and Lapithae, or the splendid Athenian youths on their sturdy prancing little steeds in the Panathenaic frieze? It is all natural, but nature at her best, purged of human defect, idealized, transformed, seen as it were through a veil of Olympian light.

Besides sculpture, colour formed an essential part of the decoration, as is proved by the remains of it still existing. The backgrounds were strongly coloured to give good relief to the sculpture, which itself was tinted and gilded. It is probable that the outer walls of the cella were painted with subjects for which the peristyle afforded protection from weather.

The Erechtheum. Ionic order.

Let us turn to another building on the Acropolis, coeval with the Parthenon but in a different style. The Ionic style bears traces of a Persian origin in its greater delicacy, more slender proportions, and greater freedom of design. The Erechtheum on the Acropolis is in fact a group of three temples thrown together, as it were accidentally, with a deliberate avoidance of any orderly arrangement or purpose (Fig. 4). No Gothic structure ever equalled its freakishness or its irregularity, which seems designed intentionally to puzzle the observer at first sight. The buildings are on different levels, of different heights, and look different ways. On one side is the porch, well known from the figures of the Caryatides—female captives from Caria—which take the

place of columns to carry the roof (Plate III.). To design these so as to suit them agreeably to their task needed the utmost artistic nicety. The figures are not drilled into columnar rigidity like those of Egypt, or the figures in the doorways of Chartres or Amiens, but are treated with full feminine grace quite naturally and yet seem equal to their task. Observe the art with which the outer figures are poised on the outer

The Caryatides.

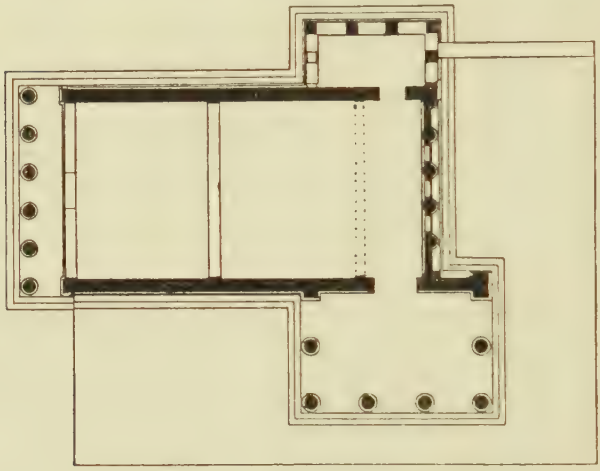


Fig. 4.—The Erechtheum.

leg, so as to throw that hip forward and to give a full outline to that angle of the group, and imagine what the effect would be without it.

From the East, and probably mainly from Persia, comes the spiral ornament, the volute which characterizes the Ionic order, and the more delicate mouldings of the base and order generally. Sculpture plays a less essential part in the Ionic than in the Doric order, there being less room on the frieze, and in the smaller buildings of the style ornament is consequently bestowed rather on the mouldings.

The Ionic order.

[*From Stuart & Revett.*

THE ERECHTHEUM.

To face page 10.

The famous temple of Artemis at Ephesus was Ionic, and on a vast scale. It was octostyle and dipteral, that is, it had a double row of columns in the peristyle. Those next the two façades were *celatae*, embossed with carving on the lower part of the drum, an example of which is in the British Museum.[1] Enriched with all the resources of art, this temple was ranked among the wonders of the world, and in the interior behind a vast purple curtain was enshrined the διιπετὲς ἄγαλμα, the image that fell from heaven, a fetish formed like a multimammal doll. Great indeed was Diana of the Ephesians.

Temple at Ephesus.

In the temple of Apollo at Bassae in Arcadia, the two styles, Doric and Ionic, are used together, the latter for the colonnades in the interior of the cella.

Temple at Bassae.

The Corinthian order, though of Greek origin, is more in vogue in Roman work. The capital is composite; the lower part of the bell is surrounded by springing foliage, like Egyptian work, while the upper has a version of the Ionic volute. These were better combined in Roman work than in the few examples we have of Greek Corinthian.

Corinthian order.

Little or nothing remains of the domestic work of the Hellenic period to tell us how the people lived during that time. The day was long gone by of the Homeric palace, with its splendid equipment. Plato says somewhere that when private houses showed signs of wealth and splendour it betokened a luxurious and degenerate city. It is probable that the Greek house during this brilliant age was of modest dimensions, leaving both public and private wealth free to be spent on the magnificent public buildings which redounded to the fame and grandeur of the mother city. It was so in the earlier Middle Ages, when the Italian citizen lived

Greek domestic work.

[1] It weighed 11 tons. Mr. Wood says the temple measured 342 ft. 6½ in. by 163 ft. 9½ in., and the columns in the lowest part were 6 ft. 0½ in. in diameter. This at the Vitruvian proportion of 8½ ft. diameters, exclusive of the base, would give the height of 55 ft. 8¾ in. for the columns including the base. Pliny gives the height 60 ft. (Wood, *The Temple of Diana at Ephesus.*)

for the honour and glory of his *comune*, and lavished all his money on the Duomo or Town-Hall which was to make his mother city finer and greater than the rival cities her neighbours.

Of this building work during the Middle Ages we have some contemporary records, but though the brilliant period of Greek art which we have been describing coincides very nearly with the most brilliant period of her literature, we should not know from writings of that time that anything extraordinary had been going on in the sphere of Art. It is never mentioned. Its fame and glory are the growth of later days. It would pass at the time as a matter of course ; the natural way of doing things in a day of ease and prosperity. The artist had no honour paid him. Pheidias was accused of stealing some of the gold given him for his figure of Zeus, and only saved by having at Pericles's suggestion made the gold removable so that it could be weighed. Later he was cast into prison on another trifling charge, where he died. The artist ranked only as a master workman. It was not till the Renaissance in the fifteenth and sixteenth centuries and afterwards that he became famous and was admitted as an equal to the society of sages, statesmen, and princes. Plutarch says, " Often when we are pleased with the work, we slight, or set little by the workman or artist himself. No well-born youth ", he continues, " would be inspired by the statue of Olympian Zeus to desire to be a Pheidias, or by that of Hera at Argos to be a Polyclitus." These prejudices survived even in the day when art had become the fashion. Lord Chesterfield advises his son to study something of architecture, but to be careful not to go too deep, or to know too much like Lord Burlington, who had " lessened himself " by too profound a study of the subject.

Slight regard for the artist.

CHAPTER II

ITALY

Etruscan and Roman architecture.

We have already described the Greek settlements in South Italy and Sicily. Of the original inhabitants of the rest of the peninsula little has come down to us but names. They were, in very early times, subdued and absorbed by the Etruscans. This mysterious people, whose origin is doubtful, and whose language though we can read it still defies interpretation, once ruled all North and Central Italy and imposed their laws and customs on the whole population, including Rome herself in her infancy. Long before that nest of outlaws and robbers was planted on the Palatine hill Etruscan civilization had been firmly established, and Etruscan art had made its way throughout the people. When definite history begins the wider Etruscan dominion seems to have shrunk to Central Italy, where a confederation of twelve cities ruled the land, of which Tarquinii seems to have been the chief. Placed between the two civilizations of Greece and Etruria Rome was naturally affected by both, and Greek influence also played a great part in the art and culture of Etruria. But it was from Etruria mainly that Rome borrowed her civilization. Themselves, in the words of Ennius,

Primeval Italy.

The Etruscans.

The Romans.

> Stolidum genus,—
> Bellipotentes sunt magi' quam sapientipotentes,[1]

the Romans originated little in the way of culture and

[1] Cited, Dennis, *Etruria*, vol. i. p. xxvi, Introduction.

had to acquire it from their neighbours. To Etruria they were indebted for their arts and sciences, for most of their social and religious institutions, and generally for the influences that helped to raise them into a well-ordered and civilized community.

Etruscan influence on Rome.

Though we must await the re-discovery of the twelve books on Etruria by the Emperor Claudius to solve the mysteries of her origin and language, we have in the painted tombs of the Etruscans a picture, unrivalled even by the Egyptians, of the manner of life, social habits, and religious belief of the people. We see them in their houses, at their feasts, at their games, at their funeral rites, we even follow them to a realm beyond the grave, and witness the judgment of the arbiters of the other world. There is little that can be called architectural in these tombs. They are mostly excavated entirely below ground, and approached by descending steps which were carefully concealed by earth. In some cases, as at Orvieto, the fronts are built with masonry, and exposed to narrow lanes sunk below the surface, but they are without any positive detail. There is nothing to enable us to reconstruct any actual building from a painted representation.

Etruscan tombs.

The Etruscans have, however, left us magnificent masonry in the Cyclopean walls of Cosa, Fiesole, and many other old Etruscan towns. Perugia is still entered by a fine gateway of which the lower part at all events, with the two battering towers between which it stands, is of original Etruscan work. But the great contribution of Etruria to architecture is the Arch.

Etruscan masonry. Perugia.

It has often been asked, When was the arch invented? The proper question would be, When did the Arch come into architecture?

The arch.

For the arch never was invented. Like the lever or the wedge, it must have been known from all time, ever since men began to put stones together. Accident must have discovered it from the very first attempt at building operations. Arches occur in some of the oldest buildings in the world. They are found in the

drains of the palaces of Nineveh, in Egyptian tombs near the Pyramids of Ghizeh, and in Egyptian tombs and temples near Thebes. In all these cases the arch is hidden, or kept in the background,—nowhere confessed ; it seems as if it were a building expedient, to be ashamed of. The Greek with his supreme intelligence in building must of course have known it, but he made no use of it in design.

Etruscan use of the arch.

It was the Etruscan who boldly brought the arch forward as an element not only in construction but in artistic design. The cloaca maxima which runs across and drains the Roman Forum is the work of the Etruscan king of Rome Tarquinius Priscus, and it is a work on a monumental scale, a tunnel built with fine large masonry of which the mouth can be seen in the river wall, a work worthy of a king. Arches abound in the remains of Etruscan walls. That alluded to at Perugia, the Arco d' Augusto, is a very considerable building. The work seems to be original up to the springing of the great arch. The upper part was probably reconstructed in Roman times, but it is archaic in character, and no doubt replaced an original one of Etruscan building.

Perugia.

Words can hardly express what this emancipation of the arch means to architecture. It was the greatest revolution in the history of the art. No longer were intercolumniations limited to the length beyond which the short tensile strength of the stone lintel could not be trusted. Pillars and piers might be spaced widely apart without danger, the interval being safely spanned by an arch. The advantage was felt not only in the greater economy of building by the saving of so many costly supports, but in the greater convenience of space on the floor afforded by their omission. From the arch one passes naturally to the vault, which is only the arch produced sideways, and finally to the dome, which is the arch rotated on its axis. On this revolution by the Etruscan the whole system of subsequent architecture in Europe depended. It is difficult to return even in imagination to a building period when the use of the arch was unknown, or ignored.

Effect of the introduction of the arch.

The vault and dome.

The Etruscan by his adoption of the arch as an element in construction and in design had effected a crisis in the history of architecture. It offered the world a choice between the old trabeated construction,—construction of beams and lintels without difficulties, without the question of thrust, but simply that of dead weight; and the alternation of arcuated construction, full of fresh suggestions and opportunities, difficulties of thrust, inviting counter-thrusts and endless varieties of plan and counter-plan, involving entirely new conceptions of building possibilities and original design. Here, on the constructive side, there was no difficulty in choice. The arch took its place with all its consequences, and the old system of trabeation was forgotten so far as constructive work was concerned.

Arcuated and trabeated construction.

But the Etruscan had produced a crisis not only in Construction but in Art. The arch was to come into Architecture as an element in design. It was a fatal crisis. The arch having become the supreme motive in construction, it should have become also the supreme element in architectural design. Here the Etruscan had an opportunity that can never occur again. It was open to Etruria to invent a novel style of architecture based on the arch, that might have risen to the level of the great styles of Egypt, Assyria, or Persia, nay, of Greece herself. She should have turned her back on the trabeated style which she was abandoning in construction, and thrown all her energy into developing a new style, expressive of the great revolution she had made in construction,—the greatest in the world's history,—one that invited celebration by an artistic revolution not less important in its way, and worthy of the new departure.

Effect of the arch on art.

Opportunity of a new arcuated style.

But the Etruscans were unequal to the task. They were infected by the influence of Greek art, which runs through all they did. In these buildings the arch must have been employed in the construction, but the architects were unable to shake off the old tradition of trabeation. The Etruscan temple seems to have been a humbler version of a Greek model. It was enlarged

Opportunity lost.

to suit Roman magnificence, and we hear of splendid buildings erected at Rome during the early period when Etruscan influence must still have been powerful. The result was a conflict for precedence between the two styles, Greek and Etruscan. Offered his choice between them, the Roman with his natural greed said he would have both, and we have them both put together in juxtaposition, though only ostensibly combined. In Roman architecture we have the arcuated construction of Etruria hung ornamentally with trappings of Greek trabeated forms that have nothing to do with the real fabric.

Mixture of trabeated and arcuated styles.

In Fig. 5, from the amphitheatre at Nîmes, we have the result of this compromise—this confusion of styles. The real construction of the building is the wall containing the arch. The pillars and the entablature they carry have nothing to do but to stand against the wall and look pretty. They could all be wiped off the wall and the structure would be none the worse. The result of the elevation thus composed is *pictorial* architecture, not *real* architecture, when every feature should have its meaning, and its justification for being there at all.

Of Roman architecture during the Republican period practically nothing has come down to us. We find the Roman orders, so familiar to us, already settled and established before the beginning of the Empire. They are confessedly based on Greek authority, but greatly modified. We have a Roman Doric, and Roman Ionic, and a Roman Corinthian, each with some semblance to a Greek original. Among these orders, the Roman Doric and Ionic are but rather bungling versions of the Greek originals. It is observable that in the Doric order the old traditions of the long-forgotten timber original are still respected and observed as if it were a fetish. In the Corinthian order Rome certainly scored a triumph, for the capital is carried to a consistent completion beyond any Greek example. It was no doubt the outcome of Greek genius, for the Roman architects seem generally to have been Greek slaves.

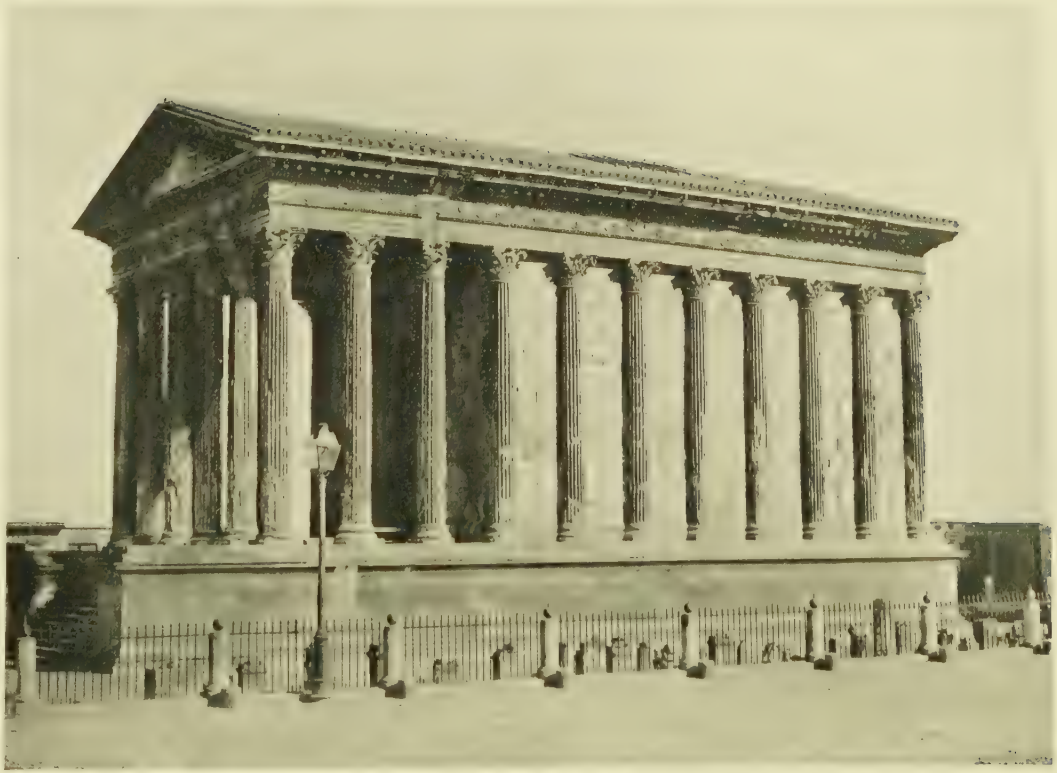
The Roman style of architecture.

The Roman orders.

Having formulated a national architectural style of

FIG. 5.

their own, regular, consistent, and applicable to all kinds of buildings, the Romans carried it with them to all parts of



NÎMES—MAISON CARRÉE.

To face page 19.

their vast Empire from Baalbec and the sands of Palmyra to the shores of Africa, to Spain, to Gaul, to Britain. It was employed on every variety of construction required by the needs of a great Empire, on palaces and temples, on theatres, basilicas, and amphitheatres, on bridges and aqueducts, on tombs and monuments and triumphal arches, and on a host of needs unknown to the world before. It was all wrought with consummate skill, built as if to last for ever. One cannot deny its beauty. It is pictorial architecture, it achieves on its own lines the beauty of a picture, and while one's judgment cannot but condemn the orders above orders that surmount the arches of the Colosseum, it is still quite possible to enjoy them. The beauty of technique in the sculptured details is beyond all praise. Words cannot do justice to the capitals of the temples in the Forum; and one can understand the stupor with which young Brunelleschi first saw—it may almost be said discovered—the remains of Roman architecture, so that he could do nothing but gaze and gaze, and forgot either to eat or drink.

Imperial architecture.

Pictorial architecture.

Fine technique.

In detail Roman architecture varies little from place to place. It is practically the same wherever you find it. Everywhere it bears the stamp of the master-hand. If it is but a fragment, there is no mistaking the work of the mighty Lords of the world; you feel none other could have done it, and it never fails to strike one with wonder and even with awe.

Universal spread of the Roman style.

The Roman temples were in general form borrowed from the Greek, but with differences probably due to Etruria. They are shorter and not peripteral. In some cases, as at the pretty little temple called the Maison Carrée at Nîmes, the peristyle, if it may be so called—for it has no cella within it—runs back with three intercolumniations from the front, which is hexastyle, but is then stopped by the walls of the cella, on the outside of which the colonnade is continued with attached half or three-quarter columns. Nothing could add to the beauty of this little gem of architecture, which is dignified by

The Roman temples.

Maison Carrée at Nîmes.

elevation on a lofty podium with a fine flight of steps in front. (Plate IV.)

The round temples of which there are examples in Rome and in the neighbourhood, as at Tivoli, are, it is said, of an Etrurian type: but they occur also in Greece. The Pantheon is the finest example of a Roman rotunda.

The Pantheon opens the way to the consideration of the concrete construction which forms a distinct feature in later Roman work. The Romans were masters of this form of construction, which might almost have been developed into a novel style of architecture. The dome of the Pantheon—the mightiest dome of all time—is of concrete. So also the vaults and domes of the Baths of Caracalla. So also were the vaults of the great Basilica of Maxentius in the Forum, where we have an example of thrust and counter-thrust, and of concentration of thrusts on isolated points, which was afterwards worked out in the constructions of the Gothic school on a comparatively miniature scale. On the Roman scale the concrete vaults practically became monoliths, and in many cases must have ceased to have any thrust at all.

The Pantheon.

Concrete construction.

The Roman house has been revealed to us by the discovery of Pompeii, where we can study its elegancies and refinements on a moderate scale. For the magnificence of the houses of the greater nobles we must trust to descriptions and such remains as still exist. Untold sums were spent on these palaces. Pliny complains that mountains, designed by nature to direct rivers and divide nations, were quarried away that Romans might sleep between walls of various coloured stones. The Campanian shores were lined with their sumptuous villas; the provinces were studded with their magnificent mansions; Italian manners and Italian luxuries were carried to the remotest parts of the Empire. In far Britain Bath can show Roman baths on a scale of magnificence, and England abounds in traces of villas where Roman potentates lived in some state, with fine pavements of mosaic, painted walls, and comfortable hypocausts to defy the climate. In Gaul and Spain the

The Roman house.

Roman extravagance.

people abandoned their native tongue for that of the great world power, and even in Britain it is suggested that in the towns at all events Latin was well understood and had even become the vernacular language.[1]

Decay of Rome.

Rome decayed, and with her decay the world wellnigh relapsed into barbarism; but her ruin contained the seeds of new life both in civil constitutions and in art, and Rome is the mother of modern civilization.

[1] Prof. Haverfield, *The Romanization of Britain.*

CHAPTER III

DECLINE OF ROMAN ART

Foundation of Constantinople—Decline of Roman art—Spalato—Christianity—Demand for churches—Met by Basilican style—St. Peter's Church at Rome, and others—Use of old materials—Wealth of the Church—Interior splendour of the buildings—Basilican style unprogressive in Western Empire—New departure of Architecture in Eastern Empire—Greek and Asiatic influence—The domed church and square plan—The new sculpture.

In 324 the Emperor Constantine founded a new Rome on the shores of the Bosporus, and in the ancient capital of the world he was seen no more.

As Rome was pressed upon more and more closely by the barbaric world that hungered for her spoils, the centres of government had been moved nearer the frontier where the enemy could be more closely watched, and whence he could be more readily repelled. The policy of Diocletian divided the Empire between two Augusti, himself and Maximian, each with a Caesar attached to him as a lieutenant, and while Diocletian himself ruled the Eastern Empire and watched the Parthian danger from Nicomedia, Milan was the seat of the Western government under his colleague. Under Constantine the Empire was reunited for almost the last time, and with an unerring instinct he chose the old Greek city of Byzantium, where Europe and Asia meet, as the seat of a new capital whence both the Eastern and the Western world could be surveyed and ruled.

Capital removed from Rome.

Constantinople founded.

During the three centuries of the Empire Art had degenerated. From the splendour of the Augustan age it passed to a stiffer and more conventional stage in the time of Trajan and the Antonines, though still retaining a grave Classic grace, which by the time of Constantine it had lost.

His triumphal arch, though decorated with some of the sculpture taken from an arch of Trajan, is covered with original sculpture that is barbarous. The traditions of correct classical architecture were forgotten or ignored in Diocletian's palace at Spalato near Salona in Dalmatia, whither he retired when he abdicated the Empire in 303, and where he planted and grew the cabbages which he said amused him more than the cares of empire.

Diocletian and Spalato.

In that building are details that would have shocked Vitruvius: there are entablatures without a frieze; cornices reduced to mere string-courses; miniature arcadings springing from corbels, Gothic fashion; whole entablatures are made to spring as arches from column to column; arches are made for the first time to spring directly from the column, without the intervention of an entablature; zigzags and other ornaments appear, unknown to classic architecture —all which irregularities and impertinences are to the Classic Purist abominable, and in his eyes the palace of Spalato ranks as an example of debased Roman architecture at its lowest.

Novelties in the style.

Decay of classic rules.

But there is another view of the matter. The old architecture was dead and could not be revived, and in these irregular and uncertified intrusions of novel forms, in which the purist only sees the outcome of corruption, a wiser judgment, justified by experience, sees the hopeful birth of new motives in the art of growth, of future development, indeed the germ of all future European architecture. It was in fact the dawn of a new world: novel requirements presented themselves to the architect. By the Edict of Milan in 313 the world practically became Christian, for Christianity only needed toleration to come to the front.

Birth of new styles.

The Christian communities, no longer driven to worship underground in catacombs and in secrecy, now came into the open and demanded places for assembly and religious worship. The temples were becoming deserted. Jerome rejoices over their cobwebs and neglect. But their small cella was unsuited for the

Effect of Christianity on art.

large Christian congregation, and for preaching. It is not known that any basilica was appropriated to Christian worship, but the basilica served for the type of the Christian church, as it does, in the west of Europe at all events, to the present day. The basilica was a place of commercial assembly, an exchange, and consisted of a nave with aisles, over which were galleries, and often it was appended to the court of justice, where in an apse the Praetor would sit on a central throne while the Judices or jury sat on seats round the apse to his right and left. The plan exactly suited the requirement of the new religion. The body of the hall and the galleries held the congregation, who could hear and see perfectly every part of the building, while the bishop sat in the praetor's place with his presbyters (or elders) in the apse beside him.

The basilica.

On a basilican plan Constantine built several churches in Rome, of which the largest was dedicated to S. Peter. It was built on Nero's circus to the memory of S. Peter and S. Paul, whose bodies by tradition are buried there. It was on a vast scale. The nave, which was 80 feet wide, was divided by ranks of columns from two aisles on each side; the inner row carried lintels, the outer carried arches from column to column. The walls above were decorated with pictures or mosaic. The Entrance was at the Eastern end, according to primitive use, and was preceded by a large court or Atrium surrounded by a cloister with towers at the entrances on the East side. At the West end of the nave was a spacious transept, in the midst of which opened an apse where was the Episcopal throne in the centre of a hemi-cycle of seats, where sat the clergy of the principal churches in Rome, the future cardinals. The body of the church was 380 ft. long by 212 ft. wide. (Fig. 6.)

Constantine's churches—S. Peter's at Rome.

Constantine's great church survived till the middle of the fifteenth century, when Nicolas V. began to pull it down and rebuilt the western part from Rossellino's design. This was destroyed by Bramante, who pulled down the greater part of the church, leaving about 150 ft. in length of the eastern part of the nave. This remained till Michel Angelo had finished the new church up to the

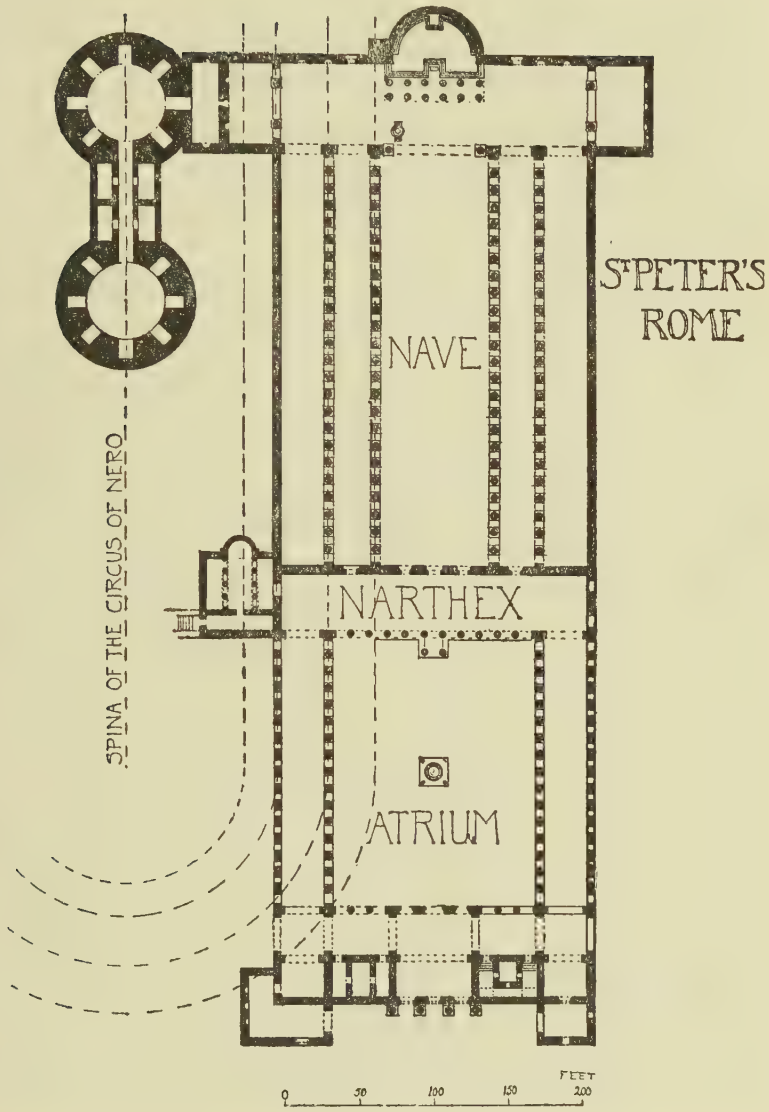

St PETER'S
ROME
NAVE
NARTHEX
ATRIUM
SPINA OF THE CIRCUS OF NERO
FEET
0
50
100
150
200

FIG. 6.

springing of the dome, and was not finally removed till 1607, when Caelo Maderno pulled down all that was left of the original building and put up the present nave and west front.

The tribune.

Good examples of tribunes in an apse with hemi-cycles of seats for the presbyters are to be seen at Torcello in the Venetian lagoons, at Aquileja, and Grado at the head of them, at Parenzo in Istria, and at S. Irene in Constantinople.

Simplicity of basilican construction.

The new type of church founded on the basilica was economical. The construction was of the simplest kind. The walls were of brick, perfectly plain and unadorned outside, and the only more substantial part of the fabric was the apse, with its semi-dome of brick, which was no great matter. The only expense was the colonnade between the nave and aisles, consisting of costly marble columns; but these were pilfered from older buildings, spoils from abandoned temples, or relics of buildings ruined by barbarian outrage. They were used at first with some sense of propriety, but afterwards at random. Columns of various heights were ranged in the same colonnade. Capitals were placed on shafts which they did not fit. Cornices were set on end to serve as columns. There was hurry everywhere.

Use of old materials.

On all sides the building of churches went on apace. Scarcely less important than the great church of S. Peter was that of S. Paul's without the walls. Built originally by Constantine on the reputed site of the Saint's martyrdom, it was pulled down within half a century and rebuilt by succeeding Emperors on a magnificent scale. (Plate V.) The eastern part remains, and the vast nave was rebuilt on the old lines after destruction by fire in 1823. The church covers an area of 400 by 200 ft. and is 100 ft. high. The nave has a space of 78 ft. Other churches arose in all parts of Rome, and the great cities of the Empire began to vie with the capital in their ecclesiastical establishments.

S. Paolo fuori le Mura.

Great church-building period.

The days of primitive Christian poverty were over. The Church under Imperial patronage became wealthy,

ROME—S. PAOLO FUORI LE MURA.

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and its offices provoked ambition. The bishopric of Rome in 366 was bloodily contested between two rival claimants, and 137 corpses were left on the floor of S. Maria Maggiore. "Make me bishop of Rome", said the pagan Praetextatus jokingly to Pope Damasus, "and I will turn Christian to-morrow."

Wealth of the Church.

These altered conditions naturally affected the architecture, and though the exteriors of the buildings remained plain and simple, the wealth of the Church was lavished on the interiors, which were lined with mosaic, faced with plaques of costly marbles, paved with slabs sliced from antique shafts, or wall-linings, enriched with such sculpture as the skill of a decadent art could furnish, mixed with fragments of work from a better period. The actual architecture remained practically unaltered. The simple basilican construction involved no fresh problems: there was nothing to suggest any new departure, and so long as the supply of old materials lasted there was no need to seek elsewhere for decoration. The style was unprogressive, and the basilican churches of the tenth and eleventh centuries in the West differ little from those of the fourth, except in details of ornamentation.

Church decoration.

Basilican style unprogressive.

But in the Eastern part of the Roman Empire it was different. By shifting the seat of Empire to the shores of the Bosporus, Constantine had brought the Arts of Rome under the influence of Greece and of Asia. The formal division of the Empire in two parts, of which one was Greek and the other Latin, did not take place till the death of Theodosius at the end of the fourth century, but it had really existed before the day of Constantine. In the Eastern part of the Empire, both in Europe and Asia, Greek was the spoken language. Constantinople was a Greek city. The council of the Church that met at Nicaea in 325 held its discussions in Greek. Constantine himself was able to muster up enough Greek to address the Fathers in that language, but his nephew the Emperor Julian spoke Greek as his mother tongue, and of his Latin it is only said that he had a "competent knowledge of it".

New style of architecture in the East.

The Eastern Empire Greek.

But the influences now brought for the first time to bear on European art were not only Greek, but Asiatic.

Asiatic influence.

The Roman province of Syria had been richly furnished with temples and public buildings in the Roman style, but it contained buildings of a native school, in which, Syria being a treeless country, greater use of stone was made than of timber. Roofs were made of stone slabs, carried on stone arches instead of wood, and the basilican plan of the Italian churches became difficult in the East. The dome solved the difficulty, and its adoption revolutionized the whole system of church architecture in the Eastern Roman world. The long-drawn nave disappeared ; the dome formed the centre of the building ; round it were grouped aisles, transepts, and other features, and the whole was compacted into a square block from the middle of which arose the dome, the original motive of the whole conception.

The dome.

The view of S. Sofia, the Cathedral of Salonica, will convey an idea of the construction of a Byzantine domed church (Fig. 7). The dome rises over a square which is the centre of a cruciform building. The four projecting arms covered with barrel vaults afford abutment, combined with the four pendentives which are in fact relics of an imaginary larger dome, and so have arcuated construction both horizontally and vertically.[1] The square spaces of the exterior square between the four arms of the great cross are covered with small domes at a lower level. The whole construction thus became a stone building from which wood was practically excluded.

Byzantine church architecture.

The domed church over a square plan in time became the recognized form in the Eastern Empire, and attained its greatest triumph at Constantinople. But for a time the basilican plan prevailed. Constantine built two churches in his new capital: one he dedicated to Peace, Εἰρήνη, the

[1] I must refer my readers for a technical account of the construction of a dome on pendentives, which would be too long for explanation here, to my *Byzantine and Romanesque Architecture*, vol. i. p. 39, with plans and illustrations.

S. Sofia
Salonica
1913

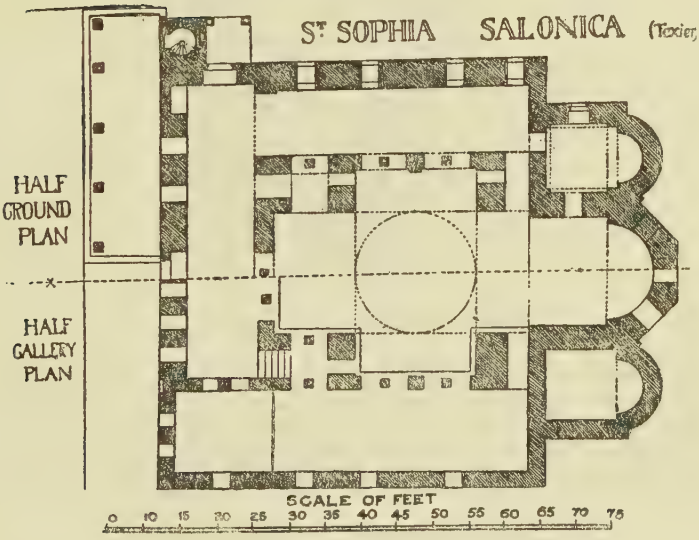
St SOPHIA SALONICA (Texier)
HALF GROUND PLAN
HALF GALLERY PLAN
SCALE OF FEET
0 10 15 20 25 30 35 40 45 50 55 60 65 70 75

Fig. 7.

other to the Apostles; both of these were no doubt basilican. At Salonica we have a round church, that of S. George in the fourth century, and the fine basilican churches of the Eski Djuma and S. Demetrius.

Salonica.

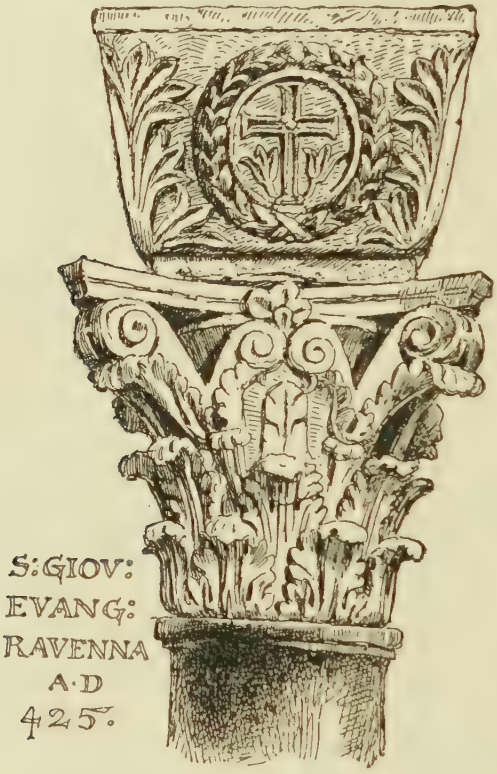

FIG. 8.—Byzantine Capital and Pulvino.

The last named, which was destroyed by fire during the late war, externally of plain brickwork, was internally perhaps the most beautiful of all Byzantine churches, rivalling, in a different style and with different material, in its decoration the great church at Constantinople itself.

Its columns were crowned by the choicest Byzantine capitals, not pilfered from some old building, but designed originally for their place. They were modelled, carved, and undercut marvellously: how much of them has survived the fire I do not know; I fear, nothing. Each of them bore the pulvino or impost-block, of Byzantine invention, by which the area of the top of the capital was expanded to take the bearing of a thicker wall above. It is a somewhat clumsy expedient, but the Byzantine artist by frankly acknowledging it, and treating it as an integral part of his construction, has justified it, and made it a legitimate feature in his style, which we should hardly know without it.

The pulvino.

Of these two basilican churches at Salonica the Eski Djuma dates from 425, and S. Demetrius from late in the sixth century. S. Sofia, the cathedral, which is a dome church, was finished in 495. The other churches in Salonica are of various domed types. At Constantinople there is but one basilican church, that of S. John Studion, now, with the exception of the narthex, roofless and a ruin.

CHAPTER IV

ROME

CONSTANTINE had built many churches in Rome. Besides those of S. Peter and S. Paul already named, those of S. Clemente, S. Agnese, S. Giovanni Laterano, S. Maria in Trastevere, S. Maria Maggiore, and S. Lorenzo fuori le Mura, among others, claim him as their founder, or at all events date their existence from his time; but they have all been rebuilt or completely altered since. Most of them were pulled down and rebuilt with greater magnificence within a hundred years of their foundation. That of S. GIOVANNI LATERANO, which was founded by Constantine to be "*omnium urbis et orbis ecclesiarum mater et caput*", has long disappeared, and after being ruined and rebuilt four times, being turned into a classic building by Eugenius IV., and being altered by almost every succeeding Pope, it is now quite uninteresting. Constantine's baptistery adjoining remains, though it has suffered much alteration, and seems indeed to have been rebuilt, using some of the original materials. The church of S. Giovanni Laterano has, however, a lovely cloister, of marble inlaid with mosaic, round-arched, on coupled colonnettes that are spirally twisted and decorated with mosaic. It is exactly like one at S. Paolo fuori le Mura, and might be by the same hand, but old inscriptions attribute them to different masters. They date from the end of the twelfth century.

Constantine's churches in Rome.

S. Giovanni Laterano.

A very charming building of Constantine's time, however, remains in the circular church of S. COSTANZA, outside Rome, which he built as a mausoleum for his

S. LORENZO FUORI LE MURA.

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family, and especially for his daughter Constantia, whose porphyry sarcophagus, now in the Vatican, was placed in the centre. The church measures 73 feet in diameter, and contains, within a surrounding aisle, a domed chamber 35 feet in diameter, formed by twelve round arches carried on composite columns coupled in pairs on radiating lines from the centre. Each pair carries as an impost an entablature from which the arches spring which support the dome. The whole conception is beautiful. The ambulatory or aisle retains compartments of a mosaic ceiling on the annular vault. This mosaic differs from the Byzantine style, and corresponds with what is found in the Roman baths, as, for instance, those of Caracalla. They are arranged in compartments where birds flutter and boys climb, men tread grapes, and herdsmen drive their teams of oxen. There is no mortuary significance, but, as in the Etruscan tombs, everything speaks of life and jollity.

S. Costanza.

Its mosaic.

The church of S. Lorenzo fuori le Mura is really composed of two apsidal churches turned back to back, so that the apses met in the middle till they were thrown together in 1216. The present choir consists of the older church, which according to primitive usage was not orientated, but entered from the east. The apse was consequently at the west end, where it met the apse of the western church, which was orientated. The eastern church, which was restored in 588, is remarkable for the gallery or matroneum over the aisles, as in the Greek churches, where it was devoted to the women, who, according to the Greek rite, were separated from the men. The gallery is carried by splendid antique Corinthian columns of the best period, and the gallery front is composed in the strangest way of fragments of classic cornices, architraves, and other features put together in a random fashion. An upper storey is carried by slighter columns with Corinthian capitals and the Byzantine pulvino, carrying round arches up to the roof. The pulvino and the matroneum speak of Greek

S. Lorenzo fuori le Mura.

The matroneum.

Greek influence.

influence, and the matroneum occurs also in the churches of S. Agnese, and the SS. Quattro Coronati. But Rome was under Byzantine influence in the sixth century.

S. Maria Maggiore.

The fine basilica of S. Maria Maggiore was rebuilt in 432 by Sixtus III. The colonnade carries lintels instead of arches like the inner colonnade of S. Peter's, as built by Constantine. Above are a series of early mosaics, which show Greek influence. This is also shown in the church of S. Maria in Cosmedin, which was given to Greeks who fled from Constantinople during the iconoclastic movement in the eighth century under the Isaurian Emperors. It was built in 772 by Hadrian I. on the site of a temple to Ceres, Libera and Libero (Proserpine and Bacchus). According to the Greek rite it has three apses, and originally there was a matroneum or women's gallery, which has disappeared. The choir enclosure, or *schola cantorum*, with its marble ambos has been restored. This ritual arrangement is more perfectly preserved in the church of S. Clemente (Plate VII.), one of the most interesting in Rome. There are three buildings over one another. Lowest of all is a Roman building, supposed to have been the dwelling-house of Clement himself; but it opens into a subterranean chapel of Mithras, whose statue, with the familiar slaying of the mystic bull, was found there, which rather militates against the Clementine tradition. Above this is the church destroyed by Robert Guiscard in 1084. Again above this is the present church, rebuilt on a smaller scale by Pascal II. in 1108 with materials from the older church below, including the choir enclosure and its fine ambos. The walls of the lower church are covered with interesting paintings.

S. Clemente.

SS. Giovanni e Paolo.

Like S. Clemente, the church of SS. Giovanni e Paolo on the Celian hill stands over a domestic building, said to have been the residence of the saints to whom the church is dedicated. The walls are painted with subjects partly pagan and partly Christian.

The Roman churches have all various points of interest

[*Photo, Alinari.*

S. CLEMENTE, ROME.

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differing from one another, but conforming generally to one type. They are all basilican, largely built with spoils of ancient buildings. One can trace the growth of Byzantine influence in the mosaics with which many of them are decorated. Those of S. Maria Maggiore, S. Pudenziana, and SS. Cosma and Damiano have the freedom of late semi-classic Roman art. From them one passes to the stiffness and conventionalism of the Byzantine style at S. Agnese and S. Prassede. With the Byzantine conquest Roman art came to an end. We see the Byzantine influence in the matroneum at S. Agnese and the earlier church of S. Lorenzo fuori le Mura, at that of the church of the SS. Quattro Coronati, and formerly at S. Maria in Cosmedin, the name of which church is said to be that of the district in Constantinople whence the Greek refugees came to whom the church was given.

Byzantine influence.

Byzantine influence, however, did not bring in the dome, which was already making its way in the East and extinguishing the basilica. In Italy the basilican plan held its own, and continued to do so through the Middle Ages. Except in such buildings as baptisteries the dome was hardly seen in Italy on any considerable scale till it came in with the Renaissance in the fifteenth and sixteenth centuries.

The dome not adopted in Italy.

The beauty of the campaniles of the Roman churches is remarkable. They are built of a brownish brick, and abound in all parts of the city. That of SS. Giovanni e Paolo is perhaps the most beautiful; others scarcely less so are those of S. Giorgio in Velabro, S. Francesca Romana, and S. Maria in Cosmedin. They are beautifully outlined, and by a delicate variation in the windows they increase in richness as they rise towards the top. Brick string-courses divide the storeys, and they are often inlaid with plaques of marble or porphyry, or sometimes with discs of majolica. They differ from the fine Lombard campaniles, which are scarcely less beautiful, in not being like them panelled by pilaster strips, as, for instance, are those of S. Ambrogio at Milan.

Roman campaniles.

At the churches of S. Lorenzo, S. Clemente, and S. Giorgio in Velabro there are baldacchini or canopies over the altar, consisting of four columns which carry a square architrave, on which is raised an octagonal structure of arcades in two storeys, and these again are surmounted by an octagonal pyramidal roof, which rises two stages higher.

The baldacchini.

Similar baldacchini to these exist in Dalmatia in the churches of Traü, Curzola, and Cattaro. I am not aware of there being any other examples of them elsewhere.

Baldacchini in Dalmatia.

But one must not leave Rome without notice of the lovely pavements of opus Alexandrinum in which the churches abound. They date from the twelfth and thirteenth centuries, but were continued still later, as for instance in the Sistine Chapel. They consist of geometrical patterns of bands of mosaic interlacing, in circles and other figures which are set in a ground of white marble. The mosaic is of red and green porphyry, or serpentino, with red, yellow and white marble, and the patterns are of infinite variety.

Pavements of opus Alexandrinum.

In England we have at Westminster Abbey a pavement in the choir and in Edward the Confessor's Chapel of this opus Alexandrinum, but they suffer from being set in our local Purbeck marble, the sombre grey colour of which does not set them off like the brilliant white of Carrara.

Italian pavement at Westminster.

Needless to say, we have also at Westminster in Henry III.'s tomb, and once had in the shrine of S. Edward the Confessor, now unhappily picked out, glass mosaic by Petrus Civis Romanus, of the school of the famous Cosmati whose work one knows so well at Rome, in the church of Ara Celi and elsewhere.

S. Edward's shrine and Henry III.'s tomb.

CHAPTER V

BYZANTINE ARCHITECTURE

Justinian — S. Sophia, Constantinople — Novelty of the plan — Its daring construction — Gradual disappearance of the basilican church in the Eastern Empire — The domed church, adopted by Moslems as type for the mosque — Italo-Byzantine work at Ravenna—Theodoric—Byzantine conquest—S. Vitale.

The NIKA riot at Constantinople.

In the year 532 Constantinople was convulsed by a riot of the blue and green factions of the circus, which is remembered from the war-cry of the rioters as the sedition of NIKA (Conquer).

The flight of the Emperor Justinian was only averted by the greater courage and firmness of the Empress Theodora. A great part of the city was destroyed, and among other buildings the church which had been built by the Emperor Constantius in honour of the Holy Wisdom, ΑΓΙΑ ΣΟΦΙΑ.[1]

The building of S. Sophia.

The reconstruction of the church was begun 39 days after the fire, from which M. Antoniades suggests that the plans had been already prepared with the view of rebuilding before the occurrence of the fire. The church of the Emperor Constantius had been basilican, but the new church was to be on a grander scale, and in a very different style. Justinian had already built for his uncle Justin, and nearly finished the fine domed church of SS. Sergius and Bacchus, which Mahomet II. called Kuchuk Aya Sofia, or Little S. Sophia. The new church was also to be a domed church, but on a much vaster scale. The architects appointed were Asiatic Greeks, Anthemius

Church of SS. Sergius and Bacchus.

[1] The dedication is to the Saviour, Christ, the "wisdom of God", *θεοῦ δύναμιν καὶ θεοῦ σοφίαν*, 1 Cor. i. 24.

of Tralles and Isidorus of Miletus. We have an accurate account of the building operations given by Procopius, who saw the church rise from its foundations. He describes the Emperor as constantly on the work, dressed in white, with a staff in his hand and a kerchief round his head. And he records some practical suggestions given to the builders by the Emperor, which with the obsequiousness of a courtier he ventures to think almost miraculous.

Plan of S. Sophia unique.

The plan of S. Sophia is unique (Fig. 9), and the principle of its construction has never been repeated. The plan consists primarily of a square 108 feet in diameter between two semicircles east and west of the same span, thus forming a hall with an unbroken floor-space of 216 feet by 108. From this splendid area one looks up to the mighty dome, 108 feet in diameter, 180 feet overhead. On the north and south sides the church extends between the huge buttresses that support the structure laterally, and is parted from the central area by screens of great marble columns, porphyry and verd' antico, brought, tradition says, from Baalbec and Ephesus. At the east end is an apse, and from the great semicircular bays are thrown out apses, exedrae, the columns of which, says Procopius, stand around like dancers in a chorus. The sculpture of the capitals of these columns and others throughout the building is of the purest Byzantine work, exquisitely finished, original, and quite free from Roman influence. The walls are lined up to the springing of the great arches with precious marbles in large plaques, and everything above is covered with mosaic of glass, now mostly concealed by the colour-work with which the Mussulman hides the representation of figures to him unhallowed.

The sculpture and mosaic.

The church is preceded by a magnificent narthex or entrance hall, extending all across the front, which is lined with marble and mosaic like the church, and westward of that still remains as an exo-narthex the eastern wall of a cloistered atrium of which the rest has been destroyed.

In the construction of the dome the architects have

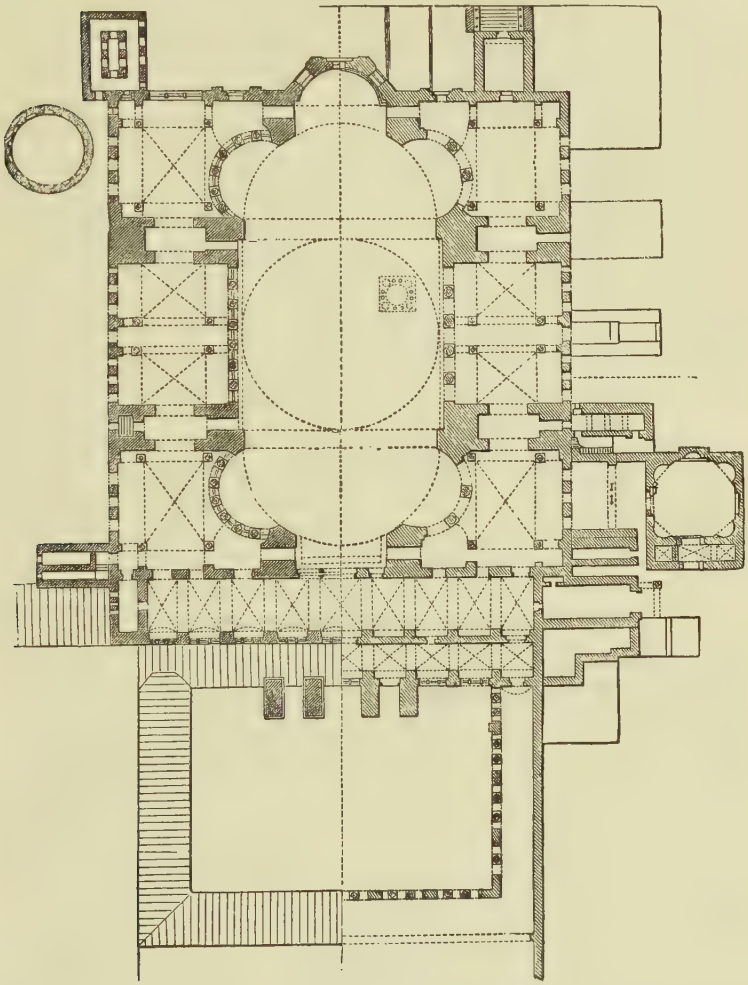

Fig. 9.—S. Sophia.

achieved a feat that has never been rivalled or repeated.

The great dome of the Pantheon rests on a circular base, and presents no structural problem. The other great domes of Florence, Rome and London rise from massive piers arranged on an octagonal plan more or less complete. That of Constantinople alone among the mighty domes of the world rests on a square, and is carried over this immense void on pendentives that spring from the angles of the great quadrangle.

Construction of the dome.

On December 26, 537, the solemn dedication of the church took place, five years and ten months only since the laying of the first stone. Alone, arrayed no doubt in the purple robes and imperial diadem as we see him in his contemporary portrait in mosaic at Ravenna, Justinian advanced to the ambo, and spreading out his arms thanked the Almighty that he had been spared to accomplish so great a work. "I have vanquished thee," he cried, "O Solomon."

The aisles that surround the great central area are in two storeys, the upper one intended for women. It is approached not only by stairs but by inclined planes up which the ladies of the court could be carried in litters. One may in imagination follow that of the stately Theodora, and sit at the triple arch in the west wall where she sat to witness the solemn rites and listen to the patriarchal homily, which was not always to her taste. Round no building do historical associations cluster more thickly than round this great church, in which for centuries the life of this great capital was centred. It has been the scene of endless theological disputes, of iconoclastic violation, of dynasty succeeding to dynasty, Isaurian and Comnenian, of the crusading outrage and shadowy Latin Empire, of the return of the Palaeologi to an enfeebled Greek dominion, and of the fatal May 29, 1453, when the Infidel burst in and swept the trembling crowd into slavery. As one wanders above and below through the vast area of S. Sophia, its historical associations almost make one forget the superlative claims of the dignity and beauty of its architecture.

Justinian built many other churches in Constantinople, notably that of the Apostles, which was to be the mauso-

S. SOPHIA, CONSTANTINOPLE.

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leum of the Emperors. It was a cruciform church, covered with five domes, and it served as a model for the basilica which the Venetians afterwards built on the lagoon and dedicated to S. Mark. In all these churches little attention was paid to the outside, which was of plain brickwork even in the great church of S. Sophia itself.

All the churches remaining in the capital are domed, and throughout the Eastern Empire this remained the accepted type. The basilican church had disappeared. The Mahometans after their conquests of Egypt and the East caught the infection. One is accustomed to associate the dome with the mosque ; but the original mosque was only a cloistered enclosure with no central building, and it remains so at Mecca round the Caaba to this day ; as also in the mosque of Ibn Touloun at Cairo and others. The domed mosque is copied from the Byzantine church, and the great mosques of Achmet Mohammad, Suleiman, Bajazet and others at Constantinople are versions more or less imitative of the great church of Justinian.

Universal use of the dome adopted by the Mahometans.

In Italy things went differently. By the end of the third and beginning of the fourth century Roman architecture may be said to have expired. Buildings were erected with no reference to Vitruvian rules. Sculpture had become barbarous. New models were adopted in design : precedent was abandoned, and ancient authority in architecture was altogether forgotten. Amid this confusion, however, one finds new methods being formulated, gradually collected into new rules of design, in fact generating a new style in architecture to replace the old in the Western Empire, as was already being effected in the Eastern.

Rise of new style in Italy.

Terror of Alaric drove the western Emperors to make their capital at Ravenna, where under Honorius and Galla Placidia buildings were erected from which all traces of orthodox Roman architecture had disappeared. They were affected by Byzantine influence, which became stronger under the Gothic kingdom of Theodoric and his successors (493–539). A great cathedral was built at Ravenna by Archbishop Ursus,

Ravenna. Byzantine influence.

probably in the reign of Honorius, and we have his baptistery, an octagonal domed building with very beautiful Byzantine mosaic. There remains also the tomb house of the Empress Galla Placidia, with the marble sarcophagi, where alone still rest the bones of Roman Emperors and an Empress. The churches at Ravenna, with one exception, are basilican, and the finest is that of S. Apollinare Nuovo, built by Theodoric and adorned with mosaics of his and the succeeding reigns. The best of these are those of Theodoric's time, between the clerestory windows. Theodoric, like all the Gothic kings, was an Arian, and when the Catholics took possession of the church they seem to have found some taint of heresy in his decoration, for the whole of the two splendid processions of male and female saints with which he had lined the wall space between the arcade and the clerestory were renewed in an inferior style a little later. Parts of the older mosaics by Theodoric remain at the ends of the processional friezes, and are in quite a different and superior style, like those in the upper stage between the clerestory windows. Still these fine friezes of colour given by the procession of male saints on the south, and female saints on the north wall, from end to end of the nave, form one of the most striking examples of Byzantine decoration. Of the other basilican churches in Ravenna some have columns and capitals stolen from older buildings. A mile or two off in the Pineta is the splendid church of S. Apollinare in Classe on the site of what was the port of Ravenna, now deserted by the sea. This is a magnificent building with antique marble columns, and capitals of original work, of the "blown-leaf" type representing the Corinthian acanthus blown open by the wind. Varieties of this capital occur at other churches. At S. Demetrius in Salonica was one with the two ranks of leaves blown in reverse directions. In other examples they are both blown the same way. In all these churches we find the pulvino on the capital, sometimes plain, sometimes carved, sometimes bearing only a cross. They are shown in the plans that have been

Galla Placidia.

Theodoric and S. Apollinare Nuovo.

S. Apollinare in Classe.

The blown-leaf capital.

The pulvino.

RAVENNA—S. APOLLINARE NUOVO.

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preserved of the vanished Ursian cathedral, which seems to be the earliest recorded instance of their appearance, and lends support to Signor Rivoira's claim for the pulvino as a Ravennate invention, and not one derived from a Byzantine source. It is observable that the pulvino is not used in S. Sophia at Constantinople, though it is found elsewhere in churches there.

The Byzantine conquest of Ravenna.

Ravenna was conquered by Justinian in 539 and added to the Eastern Empire; and one might have imagined that it was due to this close connexion that S. Vitale, the only domed church at Ravenna, was built. But it appears that it had been begun by Bishop Ecclesius, who presided over the see from 524–534. In 525 he had been to Constantinople, and though the great church was not yet begun he would have seen the domed church of SS. Sergius and Bacchus, which was then either finished or nearing completion. The beautiful church of S. Vitale is an octagon in plan, but each side of the octagon breaks out into an apse, or exedra, in two storeys. The octagon is brought to a circle by squinch arches, above the crown of the eight arches of the octagon, and the dome is consequently semi-spherical. It is curiously constructed of wine-jars, amphorae laid down on a spiral ascending line, with the foot of each jar inserted in the mouth of the one behind it. The whole is embedded in a thick bed of excellent mortar. The dome makes no show outside, for the octagonal walls are carried up as high as the crown of the cupola to afford by their weight abutment to any thrust of the dome, and are then covered by a flat pyramidal roof. The choir which projects from the eastern side of the octagon retains in perfection, lining the walls and vault, the original Byzantine decoration of marble and mosaic, which may once have covered the rest of the interior of the octagon and the dome.

S. Vitale, Ravenna.

Mosaic portraits of Justinian and Theodora.

On the sides of the choir are the remarkable mosaics of the Emperor Justinian and his Empress Theodora in all the gorgeous array of Oriental splendour, to which the simple toga of Augustus and the early Emperors had degenerated.

On the west side was a fine narthex with an atrium, which has disappeared, and the narthex itself has been mutilated by later conventual buildings. It had originally, joining it to the church at each end, a round staircase tower, of which only one remains perfect. These round campaniles are characteristic features of the period, and abound in the Venetian lagoons.

There are splendid Italo-Byzantine churches at Parenzo in Istria and at Grado on an island at the head of the Venetian lagoons. They have fine arcades of antique marbles bearing capitals of original design and great beauty. At Parenzo the choir is lined with beautiful Byzantine mosaic, and a dado of marble inlay. Grado has a splendid pavement of mosaic with inscriptions in Greek and Latin. Parenzo, which has a fine baldacchino with mosaic of 1277, is preceded by an atrium with an octagonal baptistery and tower. The date of the building is that of the Bishop Euphrasius, 535–543. Grado has a Byzantine pulpit, surmounted by a canopy that might pass for Arab work, and a Patriarchal throne made up of fragments of old screens and ciborios. The church was built by Patriarch Elias between 571 and 586.[1]

Parenzo.

Grado.

The last building that can make any claim to Roman architecture is the mausoleum at Ravenna of the great Gothic King Theodoric who died in 526. It is a rotunda in two storeys, covered with a dome made of one vast stone with pierced handles worked on it for raising it. The upper storey was surrounded by a peristyle, now destroyed.

With this building one may say Roman architecture expired.

We have thus brought the history of European architecture to a point when the style of the Classical Roman world had finally given way to new styles, which, though they originated in the orthodox Roman style, had finally parted from it and shaken off all but the very faintest traces of their origin.

End of classical architecture.

[1] Both these churches are described and illustrated in my *Dalmatia, the Quarnero, and Istria*, vol. iii.

In the East, in church architecture the basilica had given way to the dome as the motive of the plan, and the long-drawn nave to the compact square block. In the West, though the basilican plan held its own it was completely altered in detail, new varieties of capital were invented, the pulvino was used almost universally, and the whole system of interior decoration was remodelled. The use of mosaic was borrowed from the East; it was especially a Byzantine art, and inscriptions in Greek constantly occur in Latin churches. The influence of Greek art continued to be felt in the West for some time, notably to a later date in Sicily, but it gradually declined, and the West took a line of its own in art as it did in politics.

The Eastern church and dome.

Mosaic.

In the further history of architecture in both parts of the old Roman world their characteristics became reversed. Up to the point we have reached the art had shown life and originality principally in the East, and had developed an entirely new style, which reached its highest level in the great fane of S. Sophia. Meanwhile in Italy the art made little progress, and showed but slight signs of developing into anything original, such as had been achieved by the sister school in the East. But from this point we shall find that the seat of progress was in the West, where new methods were adopted and new artistic ideas grew and flourished, while in the East the art remained stationary, and sank into the languor and immobility which became the characteristic of all Byzantine history.

Stagnation of Byzantine art.

Vitality of Western art.

Henceforth it will be to the West rather than to the East that our attention will mainly be directed; that is to say, to the Romanesque rather than the Byzantine schools of architecture.

CHAPTER VI

ROMANESQUE ARCHITECTURE IN ITALY

The Lombards—Lombard Romanesque—Growth of the Papacy—Venice and Byzantium—S. Ambrogio—Articulation and vault of churches.

Chaos after fall of Western Empire.

After the fall of the Western Empire, and during the sixth, seventh and eighth centuries, the greater part of Western Europe was in a state of chaos. Britain had been abandoned to the heathen Angle and Saxon. Gaul was the prey of rude Germanic tribes, Goth, Burgundian and Frank, who conquered and settled there. Spain was invaded by the Moslem, fresh from the destruction of Roman civilization in Africa, Egypt and the East. In Italy alone order was maintained under the firm rule of Theodoric, and afterwards by the Byzantine Exarch who ruled from Ravenna to Beneventum. Under these rulers the arts flourished, and to this period we owe the series of Italo-Byzantine buildings which have been described.

The Lombard kingdom.

In 568 Italy was disturbed by the last invasion and settlement of a German people, the Lombards, who by the capture of Ravenna in 727 put a final end to Byzantine rule west of the Adriatic. But the Lombards, once firmly settled, adopted the civilization of the Romans, and became an orderly people. Under the Lombard rule, "a milder and more equitable government than any of the kingdoms that had been founded on the ruins of the Western Empire",[1] the arts to some extent survived. Queen Theodelinda, besides a palace at Monza, built a cathedral, which is described as

[1] Gibbon, chap. xlv.

TOSCANELLA—S. PIETRO.

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Byzantine in plan, cruciform with a dome, the architect probably coming from the Exarchate or even from Constantinople. The workmen were no doubt Romans.

Art under the Lombards.

We hear of the *Magistri Comacini*, no doubt a guild of Roman artificers, important enough to be regulated by an edict of King Rotharis in 643. We hear of churches and convents built and endowed at Pavia and Beneventum by Lombard kings. The interesting baptistery of Callixtus at Cividale, the ancient Forum Julii in Friuli, is of the Lombard period, and in the time of Liutprand, the greatest of the Lombard kings,[1] the fine church of S. Pietro in Toscanella was built, of which the eastern part has been altered subsequently, but the western remains of the original date.

Toscanella.

With these Lombard churches we open a fresh chapter in the history of architecture. The Greek element of the Italo-Byzantine style has disappeared, and with it the refinement that characterized it. We have a rougher kind of work, strongly marked with individuality, more original, independent of precedent either in construction or in design. In short, we pass from the Italo-Byzantine style to that of Lombard Romanesque.

Lombard Romanesque.

The church of S. Pietro at Toscanella stands romantically on a hill outside the gates of the old Etruscan city. It is basilican with nave and aisles, and an apse at the west end over a fine crypt of later date, the entrance and façade of the church being at the East, according to primitive usage. Some of the early work is very rude; there are capitals formed by roughly chopping off the angles; two capitals are antique Corinthian, and two more are of a very rude kind of Ionic. They all have massive abaci, but no pulvini. The arches are round, and have two orders, or rings, one recessed behind the other, which is a novel feature that plays a large part in Romanesque and Gothic architecture, but was unknown to the earlier styles. Another novelty is that the voussoirs of both orders increase in depth as they rise, a feature that reappears in Italian Gothic. The clerestory windows are divided outside by pilasters and

S. Pietro, Toscanella.

[1] Liutprand reigned from 712 to 743.

surmounted by arches, and great use is made of brick-work, set edgeways in a vandyke pattern, leaving hollow recesses between the bricks, which by their deep points of shadow give considerable brilliancy and richness to the exterior of the church, especially to the lofty apse, which is a very striking part of the building.

Brick decoration.

All these features are novel, and at the other church of S. Maria one finds with surprise zigzags in the arch mouldings that might have been in a Norman church in England, and dog-teeth, and an ornament very like the ball-flower of Gloucester and Leominster. But these belong to a somewhat later period.

S. Maria, Toscanella.

The Lombard kingdom was overthrown by the intrigues of a new power that had been gradually growing in Italy. Left to herself by the removal of the seat of government elsewhere, but still remembering her former state as mistress of the world, Rome found in her bishop a new head under whom she sought to regain her influence. The days were gone by when Theodoric could send a Pope to Constantinople to secure toleration for Arians, and on his return put him in prison as a traitor; or when Pope Martin, for anathematizing the Monothelites, could be dragged to the Emperor's court at Constantinople and sent to die in the Chersonese. The weakness of the Exarch and hostility of the Lombards made the Romans rely more on their bishop; and the authority and virtues of Gregory I. gave a sanction and added strength to the papal position. But the ecclesiastical views of the Church went beyond the mere civic ambition of the city. The Papacy had already begun to aspire to the supreme spiritual authority in Christendom, and for this end several changes were necessary. While subject either to the Exarch or the Lombard king the Pope was only Bishop of Rome and a subject. It was necessary that he should be independent. The circumstances of the time were favourable to this aspiration, and by adroitly availing themselves of the opportunity the Popes succeeded in

The bishops of Rome.

Growth of the Papacy.

attaining their object. By taking the lead of the image-worshippers in the Iconoclastic question, the Popes broke finally with the Eastern Empire; by invoking the aid of the Franks under Pepin and Charlemagne they destroyed the Lombard kingdom; and with the gift of the Exarchate, from Charlemagne, they became for the first time territorial potentates.

End of Lombard kingdom.

The disappearance of Byzantine rule gave a more national tone to Italian architecture. The character of the people too had been changed by the vast influx of northern settlers under Goths and Lombards who brought with them hosts of Germans of kindred tribes, of whom Paulus Diaconus gives a long list. In the fair hair and blue eyes that one sees especially in North Italy we can trace the mixture of these northern races with the old Gallic and Latin stock, a mixture that did not fail to have its effect on the art which was already becoming national.

Mixture of German population.

One state alone in Italy maintained her allegiance to the Emperor on the Bosporus, who still styled himself Roman, and here alone the traditions of Byzantine architecture were preserved. Preferring a distant and less active ruler to a more vigorous one near at hand, the Venetians, secure behind their lagoons, defied both Lombard and Frank and replied to their challenge that they chose to serve the King of the Romans. Founded at the end of the fourth century by refugees from Aquileja, and the other cities of Friuli and Venetia, destroyed by Attila, who, in the picturesque words of Cassiodorus, settled like wild fowl on the islands in the lagoons from Grado to Chioggia, the Venetians had consolidated themselves into a state that was already becoming a maritime power. On the principal island, the *rivus altus* or Rialto, in 814, Doge Giustiniano Partecipazio built the ducal palace, and a chapel adjoining, dedicated to S. Theodore. In 829 the space between the palace and the chapel was filled by a church to receive the body of S. Mark, which was brought from Alexandria when that city was taken by the Moslem. These churches, which were probably both

Venice still Byzantine.

Church of S. Mark.

basilican, were burned and a new church built in 976, by Doge Pietro Orseolo, with architects from Constantinople. It was remodelled to its present form in 1063 by Doge Contarini, who surrounded the nave or western limb of the cross with the present porticoes. The new church of 976 was built on the plan of Justinian's vanished church of the Apostles at Constantinople, and it still forms the body of the building. The plan is cruciform, a Greek cross with equal arms, with aisles, and five domes, one in the centre, the others over the four arms. Behind the present splendid facings of marble and mosaic this old church still remains. In its original form it was a plain brick building like those at Ravenna, with simple arched openings, and low domes, covered no doubt with lead, like those of the churches at Constantinople. Many of these, such as S. Saviour Pantocrator or S. Theodore, will give a fair idea of what S. Mark's at Venice would be like if stripped of the present splendid facing.

Decoration of S. Mark's.

The decoration, however, was begun at once and carried on rapidly. Ships plying to the East were charged to bring home precious marbles, columns, plaques, and slabs for pavements. The walls and vaults were covered with Byzantine mosaics. Capitals were imported from Constantinople, where, on the island of Proconnesos in the Sea of Marmora, there seems to have been a school of sculptors which produced these beautiful Byzantine capitals, and exported them to various buildings throughout the Empire. This is the explanation of the occurrence of similar Byzantine capitals in places very widely apart. The beautiful thistle capital at S. Mark's is found also at S. Luke's monastery near Delphi, at the Mosque of Keirwân in Barbary, and in the Kiblah of the Mosque of Ibn Touloun at Cairo.[1]

Export of Byzantine capitals.

Byzantine work at S. Mark's.

The variety of capitals at S. Mark's is infinite; some based on the Corinthian type, some with animals, some convex with a veil of undercut tracery. There is no pulvino, but a heavy upper abacus, anticipating that of the Gothic style. The galleries are faced with parapets formed of plutei, or carved slabs,

[1] Spiers, *East and West*, pp. 142-143.

BYZANTINE CAPITALS—S. MARK'S, VENICE.

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relics of the vanished cities of Aquileja, Altinum, Heraclea, and others destroyed by Attila, which must have served for a quarry not only of sculptured marbles, but of ordinary building material, enough to have more than built the city of Venice.

Byzantine feeling runs through all the early Venetian work. It is found in the churches of Murano and Torcello in the lagoons, and there are still palaces on the Grand Canal with Byzantine arches, and plaques of a Byzantine character. One may even detect an oriental feeling in the later Venetian Gothic with its graceful ogee curves unlike the Gothic of the rest of the world. For Venice long stood aloof from the rest of Italy and looked to the East rather than the West. Her interests were in the Levant, in Candia, in the Morea, and especially in Dalmatia, which was necessary to her command of the Adriatic, and where she contested the possession of the old Roman cities of the coast with Hungary for four hundred years till Turkish conquest laid her rival low and gave her undisputed possession of the province.

Byzantine survival at Venice.

Elsewhere than in Venice Byzantine art had disappeared and the native Romanesque style prevailed. A good example of this in its various stages is afforded by the church of S. Ambrogio at Milan. The fourth-century church, where Ambrose shut the door against Theodosius after the massacre at Thessalonica in 390, would have been a basilican church with arcades of thickly serried pillars like the Italo-Byzantine churches of Ravenna. It was rebuilt at the end of the eighth century, but of that rebuilding only the eastern apses and the older of the two towers remain. Under Archbishop Guido (1046–1071), the whole body of the church was remodelled, and converted from a columnar basilica into a vaulted church divided into distinct bays or articulations. This form of construction had been arrived at gradually, by many tentative steps, and requires explanation.

S. Ambrogio, Milan.

Referring to the plan (Fig. 10), it will be seen that the nave is divided into four equal square compartments or bays.

The aisles have each two square compartments or bays of half the width of the great one in the middle. Each of these four bays is a distinct articulation of the building, complete in itself. These bays are divided from one another by large clustered piers with a lesser pier between them corresponding with the division in the aisle (Fig. 11). Arches all four ways spring from one great pier to another. Lesser arches spring from the smaller intermediate pier. These are in two storeys,

Articulation in church architecture.

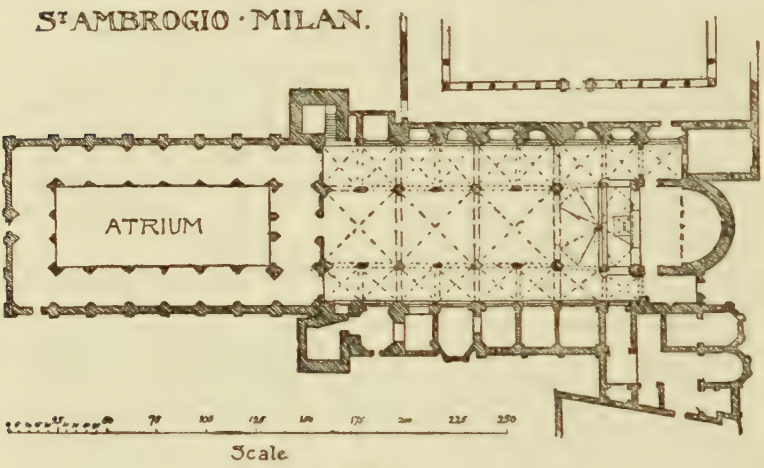

FIG. 10.

corresponding to the aisles, which are in two storeys under the single arch of the great bay. Each of the smaller bays of the aisles is covered by a stone or brick cross vault formed by the intersection of two cylindrical vaults, and a larger one of the same kind covers in one span the great square area of the central bay.

This articulation of the building into distinct, self-contained constructions, each of which might really stand alone, should be borne in mind, for it is the key to the construction of all subsequent Romanesque and Gothic architecture. It was quite foreign to the old Italo-

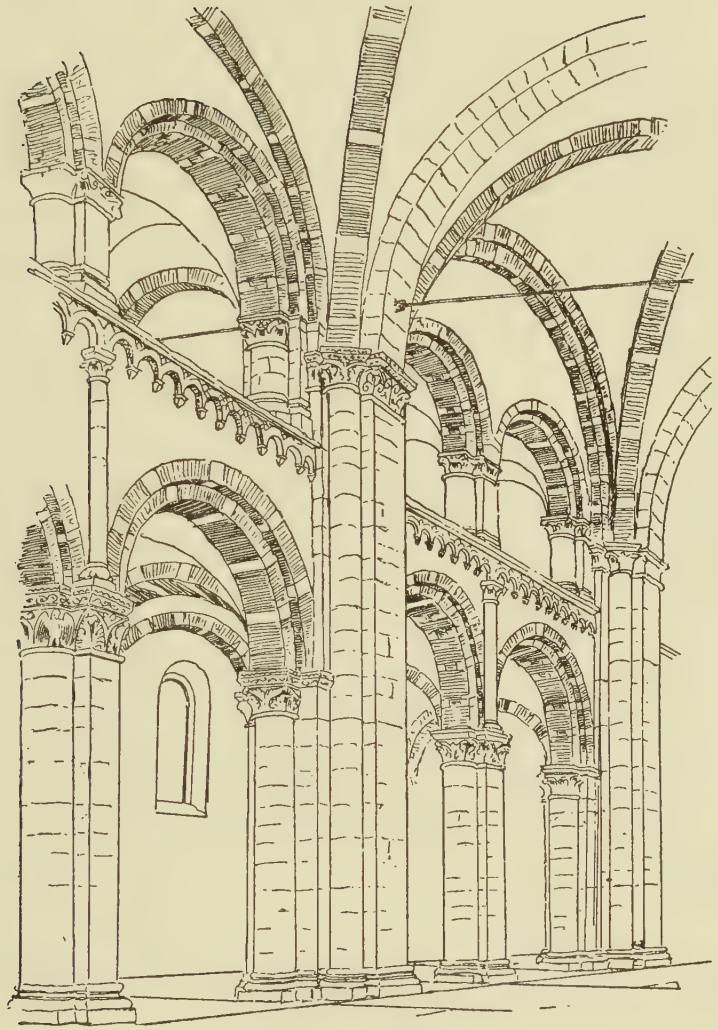

FIG. 11.—S. Ambrogio.

Byzantine method, where there was nothing to divide the long arcaded interior into sections, and it resulted from the necessities of the system of cross-vaulting.

The cross vault.

The cross vault, inherited from the Romans, is created by the intersection of arched ceilings running longitudinally and transversely at right angles to one another. The span of the transverse arch naturally gave the width of the bay, and would be marked by an arched rib across the main longitudinal arched ceiling, which would thus mark off that articulation of the building. If the two arched ceilings are of equal span, as at S. Ambrogio, the groin or line of intersection would be regular, and lie diagonally at an angle of 45° across the square bay. This would come in time to be fortified by a diagonal rib. S. Ambrogio has one, a very early instance of its employment. If, on the other hand, the two arched ceilings are of different spans the intersection is irregular, and this gives rise to endless difficulties, with which we shall be concerned later when dealing with the Gothic vault.

West of the church of S. Ambrogio is a fine cloistered atrium or forecourt which is claimed by an inscription for Archbishop Auspertus, who died in 882, but it was probably rebuilt with the rest of the church by Guido in the eleventh century.

In Lombard Romanesque, sculpture is less abundant and less refined than in Central Italy, which we shall next describe. But the style is a vigorous one and it had great effect on the ruder Transalpine nations, for which it was better suited than the more cultured art of the southern schools. It had a predominant effect on the Romanesque of Germany, of which it was the parent; and on that of Normandy, through William of Volpiano, and the school of Burgundy. It will also be remembered that the two first archbishops of Canterbury after the Conquest were Lombards, Lanfranc of Pavia, and Anselm of Aosta, whose influence was felt on the Norman architecture of England.

Effect of Lombard Romanesque abroad.

S. AMBROGIO, MILAN—ATRIUM.

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CHAPTER VII

SUBORDINATION OF ORDERS

In the Lombard architecture we find fully developed the system of subordination of orders in the arches, which has been already alluded to. But this system plays such an important part in the development of all the subsequent styles of architecture in Europe that it requires full explanation.

Sub-ordination.

In classical architecture, and the early styles that succeeded to it, the stones of the arch went directly through the whole thickness of the wall, and were necessarily very large. In the Romanesque period the means for working and handling such large stones were deficient. The builders had no longer the command of labour or material such as had been at the disposal of the masters of the world, and they had to contrive their work with smaller stones, requiring less tackle and apparatus for raising, such perhaps as a man could carry up the ladder on his back, and also needing less scaffolding and centring. They managed this as shown in Fig. 12. (1) shows a Roman arch, with a large stone through the wall; (2) shows a Romanesque arch with small stones. Two rings or orders of arch stones occupy the space of the single Roman stone, and the inner is economized by being set inwards and not reaching the outer face-line of the wall. The outer ring or order so supported as on a centre can now be made in two small stones which need not even meet in the middle of the wall, and the outer moulding can be made in very small stones entering the wall a very little way. This method admits of extension and repetition. In thicker walls there may be more rings

Economy in Romanesque masonry.

or orders, each of them set back a little within that outside it. In this way we get not only an economical device, but a beautiful architectural feature. The

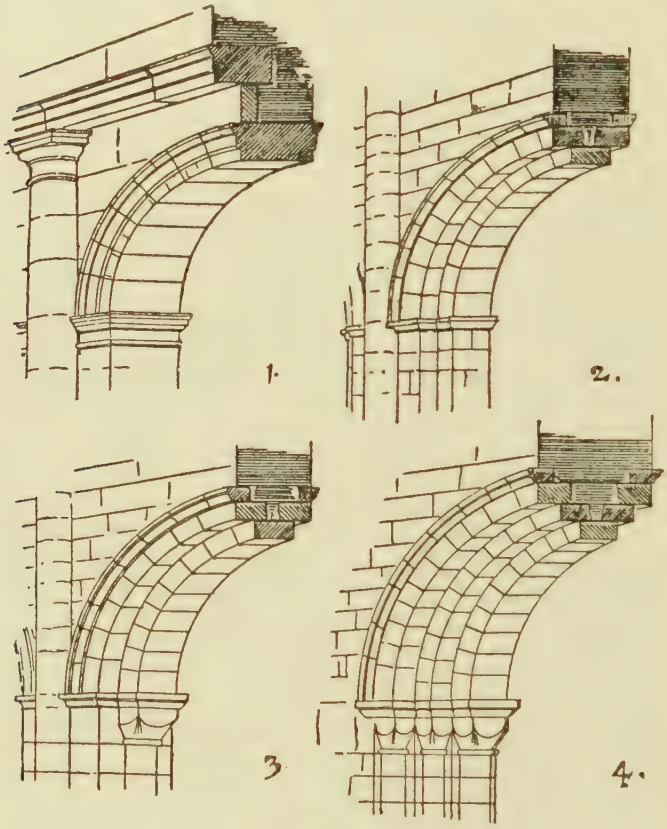


FIG. 12.

recessing of ring within ring, each ring throwing a shadow on the one within it, had an effect of which the architect was not slow to avail himself. We see it in its early simple form at S. Ambrogio, with plain square rings,

But from this beginning come all the splendours of Romanesque and Gothic arcades. At first the edge of the order would be chamfered off, next it would be moulded, then it would be carved; at S. Michele, Pavia, there are no less than seven rings or orders all richly carved. In our own country the fine Norman doorways at Rochester and Ely, of Barfreston and many more, have several orders retired within one another, and superbly enriched with carving.

But the system goes far beyond these simple instances of its application. It governs the construction of the whole fabric during the Middle Ages. The subordination of orders gives the grouping of mouldings on the nave arcades of all our cathedrals, each group representing a separate order retired within that outside it. The same system rules the window traceries of the later styles, which are retired on successive planes, one within the other, each representing a separate order. The same system gives us the great cavernous portals of the French cathedrals, Notre Dame, Rheims, Rouen, and a hundred more, which are simply formed by a succession of orders or rings of arch-stones retired one behind the other, on which the ornaments are strictly confined each to its own order. In the great portals of Amiens there are eight receding orders each carved with niches and figures, that come overhead with a magnificent sweep of fine sculpture, the glorification of what began, as I have described, in a simple device to save labour and expense by using small stones instead of the great Roman masonry. This is an illustration of what I said in my Introduction,[1] that of all subsequent developments of architecture you may generally find the origin in some suggestion of economy or convenience.

Effect of subordination.

But the system of subordination of orders does not end with the arch. It is continued in the pier and the jamb that supports it. With the recessing of the arch the Roman pier became too large and part of it had nothing to do. Consequently the recessing of the arch was continued down the supporting

Its effect on the pier.

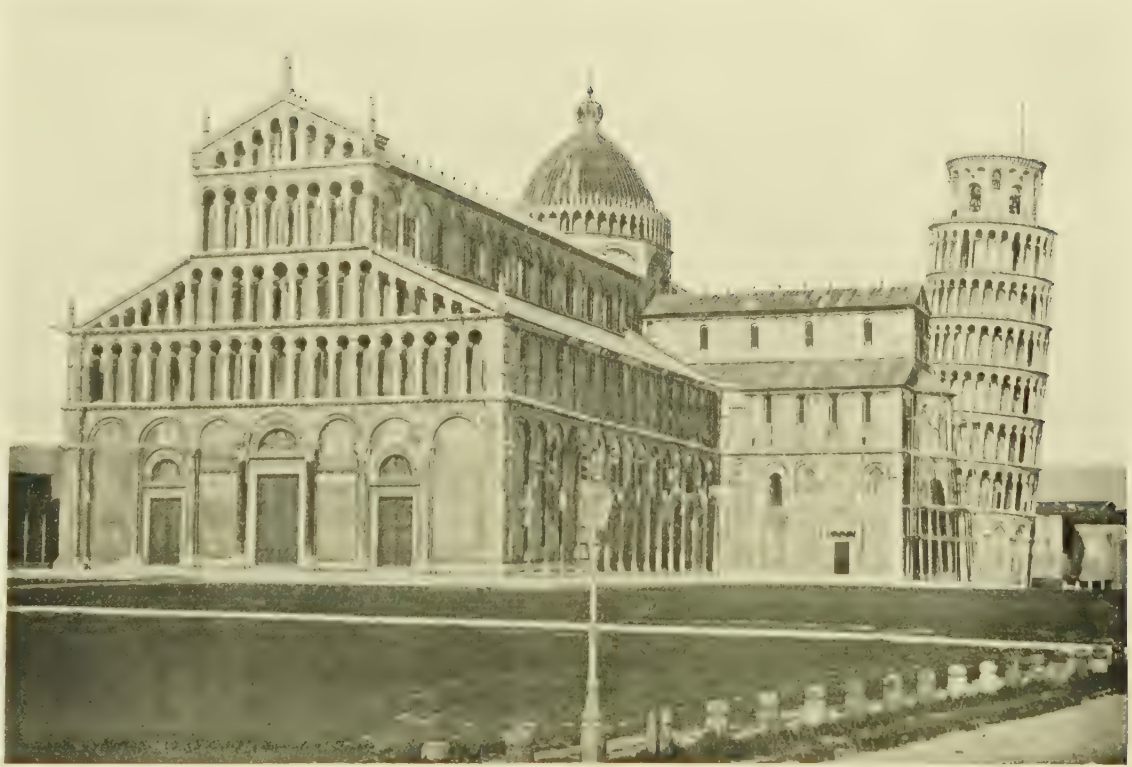
[1] *Vide supra*, p. xi.

wall or pier. We thus get a new feature in architecture : the clustered pier or jamb, in which each of the orders of the arch is represented by its own supporting member as in Fig. 12. The rigid reproduction of the exact place of the arch stones above was soon improved upon by substituting shafts for the square breaks and reveals, and afterwards by reducing the whole group of the cluster as unnecessarily large, though still preserving the system of giving each member of the archivolt its own supporting member in the jamb or pier.

This rule governs the arrangement of the figures that flank the great French portals on either side. Originally they were combined and worked on one stone with a column or shaft, and each was placed duly under its own order in the arch above. And when in later times, at the end of the twelfth and in the thirteenth century, the shaft disappeared and the figure stood as a separate statue, the same correspondence between jamb and arch was observed, and each separate figure stands under its own order in the arch.

Relation of arch and support.

This relation between arch and support was observed throughout all the best periods of the styles that succeeded, and was not forgotten or ignored till the later styles of the sixteenth century, when the mouldings of the arch, especially in the French flamboyant style, are often run down into the pier and down to the ground.



[Photo, Brogi.

PISA CATHEDRAL.

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CHAPTER VIII

ROMANESQUE ARCHITECTURE IN ITALY

Pisa and Tuscany—Rise of Italian Communes—Growth of civic architecture—Genoa.

Pisa. PISA, from her position on the seaboard, had developed a commerce and become, like Venice, a great maritime power by the beginning of the tenth century. The Pisans warred successfully against the Saracens, from whom they took the island of Sardinia in 1025. In 1063 they destroyed a Saracen fleet off Palermo, and captured spoils which they devoted to building their cathedral. They had already begun the work, but this accession of wealth made them alter their plans and build on a much more extensive scale and in a much more splendid fashion. As Vasari says, "it was no small matter at that age to set their hands to the bulk of a church of this kind, with five naves, and almost all of marble both inside and out". The architect was Busketus, or Boschetto, a Greek of Dulichium; but there is nothing Greek in his work, which is purely Latin both in plan and design. The church is a prodigy, built in a perfectly developed style, and we have no building existing that would seem to lead up to it. It is an enormous five-aisled basilica, cruciform, with aisles to the transepts and an eastern apse (Fig. 13). The aisles are vaulted, but the nave has a wooden roof and ceiling. The 68 columns of the nave are said to be antique—spoils of war—the capitals are classic, Corinthian, or composite; they have no pulvino, but a plain square abacus. The only part that seems to show Greek influence is the dome, which, however, is not

The Duomo.

Its novelty.

constructed in the Byzantine manner, but is brought by squinch arches out of an octagon, and is oval in plan.

But the outside of the church is more remarkable than the inside. It is entirely of marble: the lower storey is panelled with shallow arcading in which are panels of marble mosaic, but the upper part is decorated with pilasters, and in the apse and west front with arcaded galleries, of which the front has

The hearth exterior.

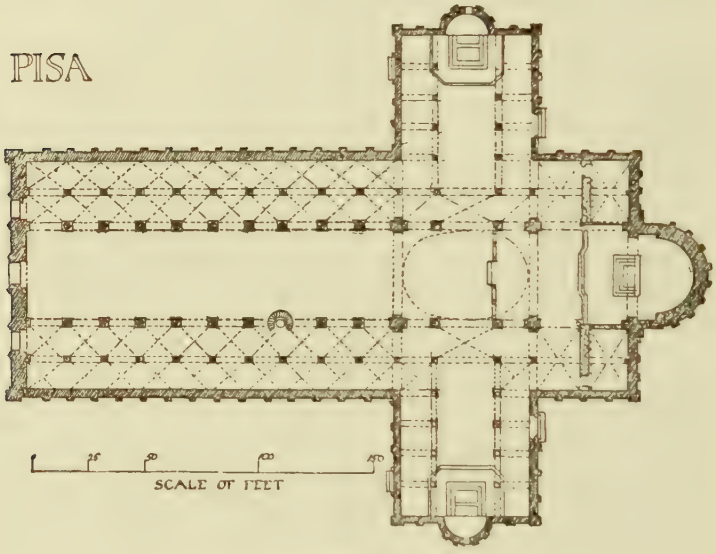


Fig. 13.

four tiers and the apse two. The splendour of this exterior, and of the adjoining leaning campanile, with its six storeys of arcaded galleries, is too well known to need further description.

The tower.

The Duomo of Pisa was consecrated in 1118, and the building had a great effect on the progress of architecture in Italy. Pistoja and Lucca followed suit, and Vasari says "it aroused in all Italy, and especially in Tuscany, the spirit for many fine works".

The church of *S. Miniato sul monte* at Florence was begun in 1013, earlier than the Duomo of Pisa, but in a style so different that it cannot have had much influence, if any, on its design. The style of the Pisan cathedral was followed in many churches at Pisa and in the neighbourhood; at S. Piero in Grado; at S. Michele in Lucca; and at S. Martino, the cathedral of Lucca, which is enriched with inlays of black marble on the arcading and its pillars. Its influence may even be traced in the arcaded and galleried façade and flank of the Duomo of Zara in Dalmatia. The arcaded gallery became a common feature in Italy, especially round the apse, as at S. Fedele in Como, the cathedrals of Parma and Modena, the church of S. Maria at Bergamo, and SS. Giovanni e Paolo in Rome.

S. Miniato.

Effect of Pisan Duomo.

Zara.

The fashion lingered long in Italy: the fine apse of the Duomo of Lucca has tall Pisan arcading below, and an open arcaded gallery above, which is dated as late as 1320. The arcaded gallery crossed the Alps and became a feature of German Romanesque: there are many examples of it at Cologne and in the churches on the Rhine.

The arcaded gallery.

The baptistery at Pisa was begun in 1153 by the architect Diotisalvi, whose name is known in connexion with other buildings. It consists of a domed central chamber surrounded by a two-storeyed aisle. On the outside the lower storey has the tall Pisan blank arcading of the duomo, surmounted by arches with pediments and crockets of the fourteenth century. The sculpture is remarkable for its classic feeling, and that on the eastern door has a fine sweep of foliage worthy of the best age of Roman art, which is surprising at this date.

Pisa—the baptistery.

The contrast between the art of Pisa and Tuscany and that of Lombardy in the eleventh and twelfth century is remarkable. It may partly be attributed to the greater wealth of material in the southern district, where there was marble at hand, while in Lombardy the main building material was brick. The superiority of material in Tuscany would also naturally

Contrast of Tuscany and Lombardy.

produce a superior class of craftsmen to work it. But even then it is surprising to find such splendid work as that of Pisa at so early a date.

The Lombard façades. The lions.

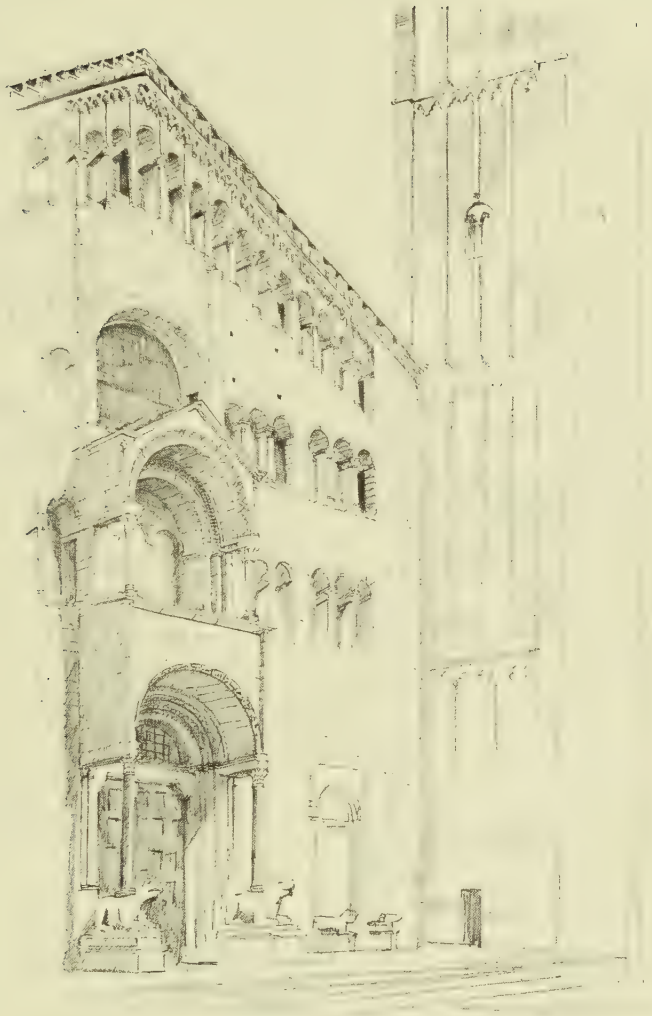
The wide-spread fronts of the Romanesque Lombard churches of Pavia and Parma, crowned by a single flat-pitched gable, compare unfavourably with the Tuscan fronts of Pisa, Lucca and Pistoja, and are hardly redeemed by the projecting porches added a century later, carried on lion-borne columns, and sometimes two storeys high. These lions guarding portals and carrying columns are not peculiar to Lombardy, but those of Lombardy are especially important. We have them at Parma and at Modena, at Ferrara, Verona, Piacenza and at Bergamo, but the finest of all are at Borgo S. Donnino, where they are on a superb scale. Elsewhere, at Toscanella, there are a pair of half-lions, but they are very small. In Dalmatia lions carry the columns of the doorways at Sebenico ; at Traü there is a pair almost equal to those of S. Donnino, but they carry nothing ; and at Curzola there is a pair on projecting brackets high in the wall, and with nothing resting on them.

Rise of Italian Communes.

The close of the period of Romanesque architecture in Italy, at which we have now arrived, is also the time of the rise of the Italian Communes to power and independence, and the lions that guard the gates of the principal church, always the emblem of civic greatness and independence, may perhaps be emblematic guardians of the freedom of the state.

The Lombard cities.

Lombardy was the cradle of communal liberty. When the Lombard kingdom fell in 774 the Franks placed counts in the cities to secure their obedience to the new Empire of the West. Side by side with the Frankish count, however, was the bishop, whose influence increased so that in time he ejected the count and took his place within the city. The count for a time still ruled the country district or *Contado* belonging to the city, and the country people got the name of *Contadini*, or county, in consequence. Finally the bishop extended his power over them too, and the count was wiped out, and with him went the shadow of imperial authority.



PARMA—DUOMO.

To face page 62.

But the whole period of Italian history from the sixth to the eleventh century is obscure. It is clear, however, that the citizens uniting with the nobles rose to independence of the bishop-count, and as a sign of self-government each city appointed two consuls, with a council or parliament, who were to be assembled by the sound of a bell—the *Campana*—which was the well-known token afterwards of civil authority in an Italian city. Whether in this there was any survival of old Roman municipal institutions is a much-debated point.

Thus established as a free independent commune, each little state made treaties or made war with its neighbours as a sovereign power. The imperial rule was distant and rarely interfered, and the Italian communes quarrelled and agreed with one another like the little commonwealths of Greece in olden time.

Independence of the communes.

Mutual jealousies and rivalries divided them. The alliances they formed with one another were casual and temporary. Even the great league of Lombardy, which brought the Emperor Barbarossa to his knees at the battle of Legnano in 1176, was constantly changing: we find Como and Cremona now on one side, now on the other; and after the contest, when the liberties of the cities had been secured by the peace of Constance, the league dissolved at once, and the cities fell into new combinations that ended in the parties of Guelfs and Ghibellines. One result of this separate policy and independence of each commune was to inspire the citizen with an intense love of his city and a desire that it should not only surpass its neighbours in power but outshine them in splendour of buildings and architecture; each city began to build or rebuild its cathedral or its town-hall in a manner that should put all others into the shade.

The Lombard league.

Growth of civic architecture.

Como rebuilt its Broletto or civic palace, other cities did the same, and at the beginning of the twelfth century Genoa, risen to the rank of a maritime power rivalling those of Pisa and Venice, began to rebuild the Cathedral of S. Lorenzo, which was consecrated in 1118.

Genoa.

The church was largely altered and extensively restored at the beginning of the fourteenth century, as is recorded by inscriptions on the walls of the nave, but the interior retains some of the original work. The nave arcades are carried by eight mono-cylindric columns of claret-coloured marble on each side, which are diminished with an entasis. Each has a course of white marble above the base. The capitals are very classic and have a deep abacus like those at S. Mark's in Venice. The splendour of this marble colonnade is almost unrivalled. The work above is of the later date: the arches are pointed, and the arches of an upper storey are open to the aisle, there being no triforium storey above it.

The west front has superb portals with marble inlay, twisted and spiral columns, and beautifully sculptured capitals which seem more French than Italian, and like other details of the front suggest foreign influence, though the marble work and general architectural treatment is thoroughly Italian. These portals seem to date from the end of the thirteenth century, when the church was extensively restored, as has been already said.

The portal.

But this takes us beyond the Romanesque period into that of Gothic architecture, which will form the subject of a separate chapter.

CHAPTER IX

ROMANESQUE ARCHITECTURE IN FRANCE

No province of the Roman Empire had more thoroughly assimilated Roman culture and the Roman arts than Gaul. The country was rich in monuments of Roman greatness. Provence and the south of France still abound in remains of Roman art, and Italy herself can show nothing finer than the temples of Nîmes and Vienne, the great amphitheatres of Nîmes and Arles, the theatre at Orange and the stupendous aqueduct of the Pont du Gard.

Gallo-Roman culture.

Roman culture in Gaul was not extinguished by the first barbarian inroads. The schools of Treves, Lyons, Arles, Toulouse, Narbonne and Bordeaux are described as still flourishing in the fifth century, and as the last refuge of Roman learning in the West. In the fourth and fifth centuries the poets Ausonius and Sidonius Apollinaris lived in a cultivated society, like Roman nobles, on good terms with their new barbarian neighbours, Goths and Burgundians, whose settlements at first do not seem to have disturbed them seriously. Sidonius dined and diced with the Gothic king Theodoric II., of whom he gives an amiable portrait. Sidonius describes his own country house, with dining-rooms for summer and winter, baths with domed roofs, rooms for the ladies and the maids, and other conveniences.

Of the architecture of this period nothing remains: but Sidonius and Gregory of Tours have left descriptions of churches built at Clermont-Ferrand, of which Sidonius became bishop, at Tours and at Lyons. They were 150 or 160 ft. long by 60 ft. wide and 50 ft. high to the roof.

That at Tours had fifty-two windows, 120 columns and 8 doors. Sidonius celebrates it in an ode, and speaks of a gilded ceiling vying with the sunshine, columns of Aquitanian marble, windows of which the glass shed a greenish light, and an atrium or forecourt with a forest of columns.[1]

Gallo-Roman churches.

These buildings, it should be remembered, were coeval with the Italo-Byzantine buildings of Ravenna, and half a century older than Justinian's buildings at Constantinople. Nothing of them now exists, and Sidonius lived to see his own beloved Clermont and Auvergne submerged by the rising tide of barbarian invasion and settlement.

Of primitive architecture in France from this period down to the tenth century we have no record. Successive waves of barbarian tribes swept over the country —Goths, Franks, Burgundians, and Normans, all German or Scandinavian tribes, who settled mainly in the north and east, while in the south, in spite of the Visigothic kingdom, the old Gallo-Roman population survived in greater purity, as it probably does to this day. "The South of Gaul", says Guizot, "was essentially Roman, the north essentially German." When in the tenth century we begin to get a clearer view of the population we find it divided into groups of independent or semi-independent states. France as a united country did not exist. Consequently there was no general style of French architecture, and it cannot be treated as a whole ; it fell into very different forms in Aquitaine, in Auvergne, in the Île de France, in Burgundy, in Normandy and in Provence, and the school of each province has to be studied by itself. These distinctions lasted not only during the Romanesque period, of which we are now to treat, but even down to a comparatively late period.

Primitive architecture in Gaul.

Difference in provinces.

Aquitaine

The territory of the Dukes of Aquitaine embraced the western and west-central parts of France, and in this

[1] Sid. Apol. *Ep.* II. iv. and IV. xviii.

district we find Byzantine art makes its influence felt owing to the trade route with Venice and the Levant passing through it. Limoges seems to have been the central depot, where a colony of Venetians had established themselves as early as 988. Eastern influence shows itself by the remarkable series of domed churches which exist in this district, and are characteristic of Aquitanian architecture. They exist at Périgueux, Cahors, Angoulême, Souillac, Solignac, Cognac, Poitiers, Fontevrault and elsewhere, and in an octagonal form at Chauvigny, Loches, Le Puy and other places.

Aquitaine.

The domed churches.

But the most singular instance of Byzantine influence is that of the church of S. Front at Périgueux. Here in the tenth century Bishop Froterius built a cruciform basilican church which was consecrated in 1047. The aisles were vaulted in stone, but the nave had only a wooden roof. This church was burned in 1120 and had to be rebuilt. The old Latin nave was retained at the west end, but eastward was built something quite novel in France. It is a copy of the Church of S. Mark at Venice, with which it practically agrees, not only in plan, but also in dimension; there are the five domes, the piers, the openings through them, and in fact the whole constructive principle of the Venetian fabric is faithfully reproduced. Some variations in the construction of the domes and pendentives seem to show that the architect was not a Greek or Italian, but a Frenchman who had seen and studied S. Mark's and has reproduced it in his own country fairly correctly.

S. Front, Périgueux.

Imitation of S. Mark's, Venice.

The domes of S. Front are exposed externally, and have the strangest effect in a French landscape.[1] In the other domed churches of this district the central dome is generally carried up into a tower; elsewhere, as at Angoulême and Solignac, where the nave is covered with a succession of domes in a row, they are generally

[1] S. Front has been severely dealt with, and in a great measure reconstructed by M. Abadie. The original pinnacles shown by M. de Veneille in his book are quite different from those now there.

covered with a continuous roof and make no external show.

Sculpture is less abundant in Aquitaine than in Provence or Burgundy, but the façades of the Cathedral of Angoulême, of Notre Dame at Poitiers and of Civray are rich in figure sculpture. The church at Poitiers is especially interesting and beautiful.

Poitiers.

It would seem that the dome did not make its appearance in France till the end of the eleventh or the twelfth century. The earlier type of covering was the barrel vault, of which many examples remain either alone or in connexion with a dome. Of the former kind there is no finer example than the church of S. Savin, which is also remarkable for the paintings on the ceiling.

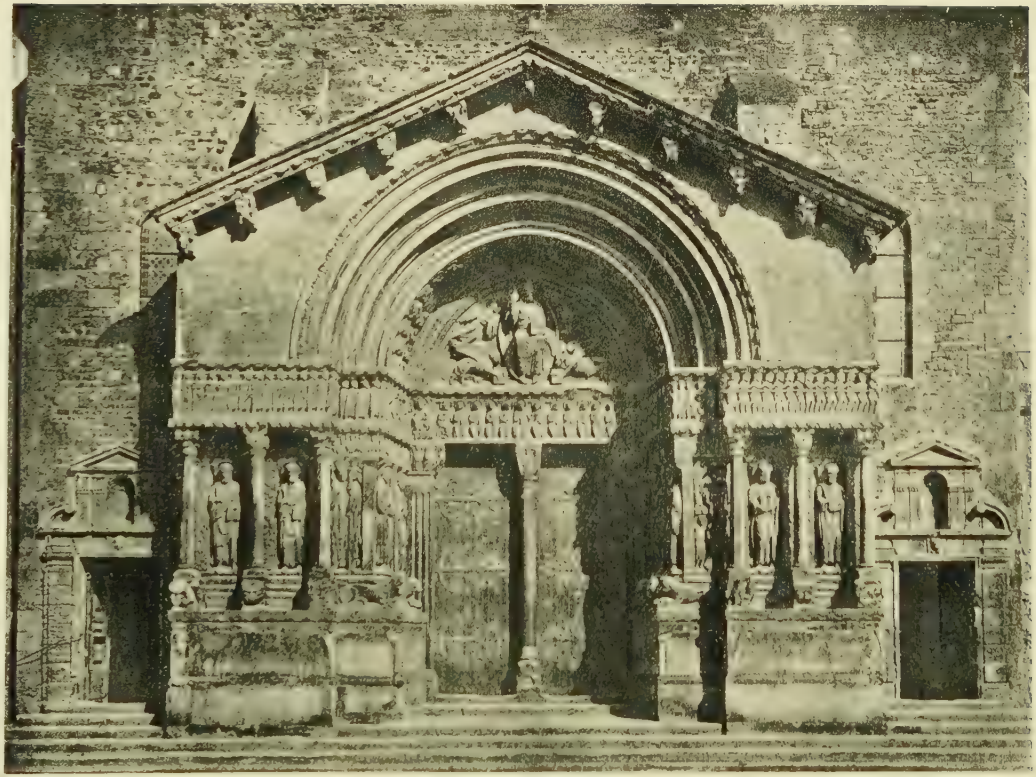
The ancient building at Poitiers, known as the Temple de S. Jean, should be noticed. The oldest part is Gallo-Roman and goes back to the seventh century. It was once the baptistery of the whole city. Its late Roman decoration on the outside is interesting.

The peculiarity of the architecture in this district is not confined to the Romanesque period. Throughout the Middle Ages, architecture in the western part of France which formed part of the old duchy of Aquitaine retained a special character distinguished from that of the central school of Gothic, which never obtained a firm footing there till quite late, when the distinctions of the provincial schools became confused. In Anjou especially, a school of architecture, which may be called Plantagenet, arose in the twelfth century, to which we shall return later.

Provence

Provence had formed part of the kingdom of Arles, and remained independent of France till the time of Louis XI. and Charles VIII. Here the influence of Byzantine art gives way to that of Roman tradition, inspired by the abundant remains of Roman art which existed in the province. The doorway of the Cathedral of Avignon is so Roman in character as to have deceived antiquaries. The eastern dome does not appear

Provence.



ARLES—S. TROPHIME: PORTAL.

To face page 69.

as a Provençal feature, and the usual covering of the churches is a barrel vault which is made up to a ridge on the back in solid masonry, so that the roof and ceiling are in one.

The stone roof, Arles.

This is the form of covering of the nave of the church of S. Trophime at Arles. The load of masonry of the arched vault of course increased its thrust, and to reduce this the vault was made pointed instead of semi-circular, throwing the thrust more obliquely and downwards. The aisles have quadrant vaults, counter-thrusting the thrust of the nave. A sturdy Romanesque tower in three storeys, with Corinthian pilasters, surmounts the crossing.

Portal of S. Trophime.

In contrast with the simplicity of the church is the well-known portal, which is one great glory of Provençal Romanesque. It dates from the twelfth century, and in no other part of France could sculpture have attained such a degree of excellence at so early a period. The ornament is with consummate taste confined within limits instead of running riot over the whole design as in some later Gothic buildings: so that there is plenty of plain surface to relieve the sculpture. In the tympanum is our Lord seated in a vesica between the four Apocalyptic beasts, with angels surrounding Him in the soffit of the including arch. A frieze of little figures below runs all across, which is carried by a magnificent colonnaded stage with large figures recessed between the pillars. The delicate refinement of the whole treatment, combined with the bold simplicity of the general conception of the design, make this portal a masterpiece.

Portal of S. Gilles.

Fine as it is, this doorway at Arles is rivalled, if not surpassed, by that at S. Gilles, where I think the figure carving is if anything superior. But the arrangement of the work has been disturbed, and part of the composition seems incomplete.

Cloister, Arles.

S. Trophime at Arles has not only the portal of which to boast. The cloister is not less beautiful and interesting. The oldest part seems to be the north walk, which contains a tablet with an epitaph of 1140. The cloister consists of round arches on

coupled colonnettes, which have a joint abacus covering the pair, and richly carved. They carry a barrel vault over the cloister, ramped up against the back-wall. The great piers at the angles of the cloister are carved with large figures, and on the outside by way of buttresses are pilasters carrying Corinthian capitals. The ornaments both here and at S. Gilles are purely Roman, with no trace of Byzantine feeling: frets and the guilloche; scrolls of a Roman character, and the shafts are fluted.

There is, however, a remarkable piece of Byzantine work at Riez, near Draguignan; it is a building called the Pantheon, a square, containing an octagon with niches that fill the angles of the square, within which is an octagonal aisle with an annular barrel vault surrounding a ring of eight columns that carry a dome. It is in miniature, like the church of SS. Sergius and Bacchus at Constantinople.[1]

Riez.

Toulouse

Toulouse and Languedoc were at first a county independent of the French Crown; they were brought into subjection by the cruel crusade against the Albigenses at the beginning of the thirteenth century, which was prosecuted "with every atrocious barbarity which superstition, the mother of crimes, could inspire". Languedoc, the most flourishing and civilized district in Gaul, was laid waste, her cities burned, and the inhabitants destroyed by fire and sword. It is therefore not surprising that monuments of the Romanesque period in the county of Toulouse are less abundant.

Toulouse.

The vast basilican church of S. Sernin at Toulouse, of the eleventh century, however, remains, and is especially interesting as affording an early example of the *chevet* or apse with ambulatory aisle and radiating chapels, which became a recognized feature of French church architecture.

S. Sernin. The chevet.

[1] The building at Riez is illustrated by Texier and Pullan. I have not seen it myself.

The earliest Christian churches, of course, had no chapels. There are none in the earlier churches of France, nor any ambulatories. Some of them, as Poitiers and certain of the domed churches in Perigord, end square. Autun finishes with three apses, corresponding to the nave and aisles, and has neither ambulatory nor radiating chapels, resembling the basilican churches in Constantinople and many others in Italy and Dalmatia. The cathedrals of Sens and Langres, at the end of the twelfth century, have an ambulatory and a single projecting chapel. Chapels were at first more numerous in conventual churches than in cathedrals, in order to provide for the needs of the laity, who were jealously excluded from the choir of the fraternity. But in time chapels clustered as thickly round the apses of cathedrals as those of conventual churches, and Le Mans has no fewer than thirteen.

The chapels.

In England the chevet with regular ambulatory and radiating chapels appears only at Westminster, which, though English in detail, is planned on a French model. Some attempts at apsidal chapels are made at Tewkesbury and Pershore and in the cathedrals of Canterbury and Norwich, but they are very unlike the regular French chevet, and indeed the plan is inconsistent with the favourite English East end.

Chevet not English.

The abbey church of Moissac, north of Toulouse, has a fine cloister, which was rebuilt in Gothic times, but retains the capitals and piers of 1100. At the west end is a tower, fortified with crenellations, significant of the troubles of Simon de Montfort's crusade. It contains in the lower part a splendid portal of Romanesque work. But the sculpture is very inferior to that of Provence, the figures being lean and distorted, with no trace either of Roman or Byzantine grace; but in spite of this deficiency it breathes an air of growth and vigour promising to lead up in the end to the excellence of the Gothic school.

Moissac.

Burgundy

Burgundy, and the Burgundians.

The Burgundians, unlike other barbarian invaders of Gaul, came in as Christians. Harassed by Huns, they turned to the God of the Romans, who, they understood, succoured those that feared Him, and, encouraged by a victory over their enemy after they had submitted to the rite of baptism, they, says the historian, "Christianized fervently". Sidonius Apollinaris, who was their neighbour, though his fastidious taste was offended by the reek of onion and garlic from their kitchens, and by their habit of greasing their hair with rancid butter, seems to have regarded them as good-natured hairy giants with whom one might live on friendly terms.[1] They are described as an industrious people, engaged in various crafts, so that they were well-to-do and prosperous. From such a people great things might be expected in architecture as they became cultivated, and they have not disappointed us. Of all the Romanesque schools in France the Burgundian is the most fertile, and its influence the most widely spread.

Monasticism.

This is in a great measure accounted for by the fact that in Burgundy monasticism established itself more firmly than in any other part of Western Europe; and from the great Burgundian centres at Cluny, Citeaux and Clairvaux the passion for coenobitic life spread over the whole of Western Christendom. Cluny was founded in 909 by William, Duke of Aquitaine, to reform the laxity into which the Benedictine order had fallen. Citeaux was founded in 1098 to enforce a more rigid discipline than that into which Cluny had relapsed, and the daughter house of Clairvaux, of which S. Bernard was the first abbot, was regulated with increased austerity. Monasteries under these rules sprang up in all the countries of Europe, and, being affiliated each to the parent house, they formed powerful associations, closely bound together by their common origin. Over each

Cluny, Citeaux and Clairvaux.

Affiliation of convents.

[1] Sid. Apol., Carmen xii. ad V. C. Catullinum.

group of associated abbeys the head of the order ruled like a temporal prince. In the eleventh century 314 abbeys submitted to the rule of Abbot Hugh of Cluny, who struck money in his own mint like the King himself. The Cistercian rule was obeyed by countless abbeys in Italy, France and Germany, and in England by those of Buildwas, Byland, Fountains, Furness, Kirkstall, Netley, Rievaulx and Tintern, besides many more. The headship of each house was in the gift of the head of the order, and after a long struggle the monks obtained exemption from episcopal control, and acknowledged subjection only to the Pope direct.

The effect of these monastic institutions on civilisation and the arts is obvious. In those ages of misrule it was only in the cloister that there was any place for the practice of the peaceful arts. Round its walls forests were cleared and land reclaimed; within its walls the manual arts were practised with gradually increasing skill; for nowhere else were artisans to be found except perhaps in Italy. The monks had to be their own masons, carpenters, builders, glaziers and sculptors. They were not necessarily priests; many were laymen, and in early times they were even discouraged from taking orders, on the ground that the priesthood was a snare that diverted them from their duty of divine contemplation. They were artisans, encouraged to work at their trades by the rules of their order which forbade them to be idle, but they were not to take any pride in what they did. This is indeed a counsel of perfection, and it is impossible to believe that the artist-monk did not feel a joy when he had achieved what he felt to be his masterpiece. Thus the arts began once more to flourish, and it was in the convent that the first signs of progress and development showed themselves.

Convent refuge of the arts.

The great church of Cluny, which was begun by Abbot Hugh in 1089, has almost entirely disappeared. It was the largest church in the west of Europe. The Cluniac church of VÉZELAY, which was founded at the same time, however, remains, and in it we see Burgundian art at its best. The choir and transepts were

Vézelay.

rebuilt in the thirteenth century, but we have the Romanesque nave which was dedicated about 1102, and the narthex or ante-church, dedicated in 1132.

This large narthex is a Burgundian feature, forming almost a church in itself. That at Cluny was five bays in length; that at Vézelay has three bays, consisting of a nave and aisles, both vaulted, and the aisles have a triforium or gallery above them. The doorway from the narthex at Vézelay into the nave of the church is a magnificent piece of Romanesque architecture. It is a double portal divided by a central pillar, on which is a figure of S. John Baptist holding a large disc on which is a mutilated figure of a lamb, for which the disc formed a halo. The tympanum is rich in sculpture: in the centre is our Lord in a vesica bestowing the gift of the Holy Spirit on His disciples, represented by a ray to each of them from His fingers. The signs of the Zodiac and various other subjects are in the enclosing arch.

Burgundian narthex.

Vézelay portal.

There is a similar Romanesque doorway at Autun, which is preceded by a narthex, two bays long, with aisles; but it is not enclosed, and stands open to the west.

Autun.

On both these doorways the sculpture is like that at Moissac, far removed from the grace of that at Arles and S. Gilles. The figures are attenuated, forced into unnatural attitudes and extravagant, but in spite of their barbarism they have a spirit and life about them that speaks of future progress.

Burgundian sculpture.

There is no Byzantine feeling in this Burgundian work: the influence is frankly Roman. The great consoles that carry the vaulting of the chapter-house at Vézelay are based on the Corinthian capital: the leaves are ruffled in the Roman way, not with the Byzantine crisp, sharp foliage, and there are the volutes, the rosette, the hollow abacus and the deep channelled pipings of the Roman type. In the cathedral of Autun the pointed waggon vault is carried by pilasters with Roman fluting, and Cluniac Attic bases. There are fluted pilasters and shafts with Corinthian capitals in

Roman influence.

VÉZELAY—DOORWAY FROM THE NARTHEX.

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the church of S. Jean in the same old Roman city, which still retains two of its Roman gates.

There is the same broad Roman treatment in the sculpture of the capitals of the fine church at Avallon, and in the arches we find the classic fret or guilloche that occurs in the portals of S. Gilles.

Cistercian buildings.

The rule of CITEAUX, founded in 1098 as a revolt against the luxury of Cluny, spread so rapidly that in twenty-five years the Cistercians numbered 60,000. Strict rules for the regulation of the buildings were drawn up in 1119. The abbey was to contain everything necessary for the community, so that the brethren should not have to go abroad. The greatest simplicity was enjoined in the churches. There was to be no painting or sculpture, no coloured glass, and no imposing campanile. S. Bernard declaims against the fine dresses of the Cluniacs ; " kings might wear them if cut to their fashion ". He condemns the extravagant scale of the churches, the paintings on the walls that distract attention. " Even on the floor are images of saints which we tread upon. Men spit in the face of an angel and trample on the features of saints." In the cloisters he derides the monsters, the apes, the savage lions, the trumpeting huntsmen in the capitals. " You may see many bodies with one head, or many heads on one body ; quadrupeds with serpents' tails, and others with fishes' heads " ; " Good God, if you are not ashamed of such silly things, why do you not grudge the expense ? "

S. Bernard on church architecture.

These Puritan restrictions, however, did not prevent the Cistercian from building beautifully. He has shown us that without positive ornament, by careful study of proportion, of scale, of nicety of outline and dignity of mass he can with his work reach the highest level of art. But I have already dwelt upon this in a former chapter.[1] We shall return to Vézelay when we come to the Gothic vault.

[1] *V. supra*, p. xv.

Auvergne

Auvergne.

Auvergne, in the churches of Clermont, Brioude, S. Nectaire and others, has a class of buildings of an original style, quite peculiar to the district. The country is volcanic, and basalt is employed as a building material, mixed with a freestone, used sometimes in a rough mosaic, but generally as dressings, for which

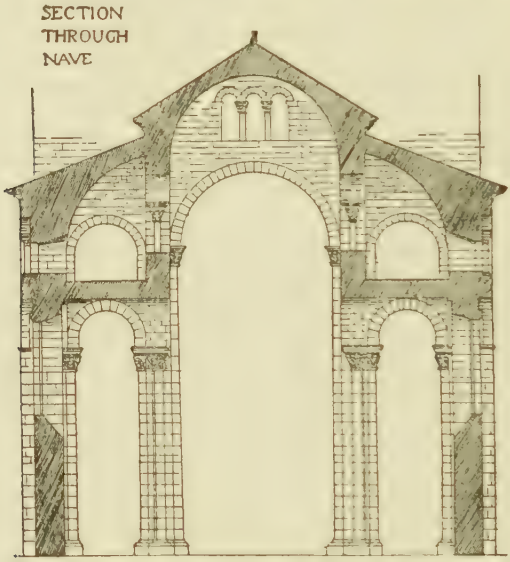

Fig. 14.—Clermont. Notre Dame du Port.

Plan of Auvergnat church.

the intractable volcanic stone is unsuitable. These churches date mostly from the twelfth century. They are basilicas and cruciform, but the management of the crossing is singular; the inner part of the transept only, corresponding to the aisle, is carried up to the height of the nave, while the rest which projects beyond is kept low (Fig. 14). This arrangement forms a good shoulder for the central tower and cupola, which is an octagon and finishes with a

CAPITALS FROM NOTRE DAME DU PORT, CLERMONT.

To face page 77.

pyramidal roof. The barrel vaults of the nave are loaded with a roof of solid masonry and counter-thrust by quadrant vaults over the triforium of the aisles. Stability is provided by the outer walls of the aisles, which are very thick. The polychrome masonry, caused by the mixture of basalt and freestone, is a distinctive feature of these Auvergnat churches. A band of geometrical mosaic surrounds the apse, the arches have black and white voussoirs alternately, and the gables and spandrils of the arches have the two materials arranged in geometrical figures. Except in the church at Vézelay, where white and brown stone are used in alternate courses, and at Le Puy, this is, so far as I know, the only instance of polychrome masonry in France. The fashion unhappily died out in Auvergne, and the later Gothic Cathedral of Clermont is built entirely of black basalt, with a dismal effect.

Mosaic masonry.

There is a strong classic feeling in the details of the exterior cornices, which have regular modillions to carry them. Those at NOTRE DAME DU PORT at CLERMONT are especially remarkable. The capitals of this church are good examples of a type common to the early Romanesque period, when instead of foliage they were carved with figures generally like these, with Scripture subjects, but often, in the cloisters, with the monstrous figures which provoked the satirical comments of S. Bernard.

Clermont-Ferrand.

The church of LE PUY EN VELAY has characteristics both of Auvergne and of Aquitaine. To the latter belongs the domical construction of the nave; to the former the polychrome decoration of the interior, and more especially of the charming cloister. But Le Puy is full of originalities and strange devices, and this, combined with its wonderful situation, makes the place one of the most singular and picturesque in Europe. The church is built on a rock with so sharp a descent westwards that when, after climbing a mountain of steps, you enter the western door you are still a whole storey below the floor of the church; to which you ascend by an opening in the centre of the nave.

Le Puy en Velay.

The nave is covered by a succession of octagonal domes carried on squinch arches, for which preparation is made by substantial arches across the nave. The church abounds in original features, of which the south porch, with a detached rib, under the main arch, and the strange fanciful foliage of its supporting columns and capitals is not the least remarkable. Hard by this porch is the great campanile, built entirely of basalt, a typical example of the local style. It consists of a succession of distinct stages that diminish as they rise.

The last building to be noticed in this wonderful place is the little chapel of S. MICHEL DE L'AIGUILLE, perched on a lonely pinnacle of rock in the suburbs. It is reached by a staircase cut in the rock, of which it occupies the irregular summit. It seems to date from the twelfth century, and is entered by the most piquant doorway imaginable at the head of the stair, enriched with carving and mosaic of freestone, basalt and white marble.

S. Michel de l'Aiguille.

NORMANDY

The Normans or Danes were the last and most ferocious barbarians who invaded and settled in western Europe. Repressed by Charlemagne, they returned and conquered from his degenerate successors the province that bears their name, as in England they obtained from Alfred half the kingdom. In France, after having ravaged and desolated the country, they settled down, became Christians, and with that adaptability which was their characteristic melted into the body of the people ; as in England they became English, and in Italy Italians. They became great builders, and in a century and a half they covered the land with buildings of an important character. There was little in the north of France to guide them. Gallo-Roman work there was unimportant, and Byzantine influence had not penetrated that remote province. There was no sculpture to serve for example, and the early Norman work does not go beyond plain cushion capitals,

Normandy.

Settlement of the Normans.

formed by squaring and truncating an inverted cone on the top of the shaft. The ornaments were only billets and notchings such as a common mason could chop out, or as skill increased, zigzags and such-like simple forms. These simple details, however, were used with taste, and though they cannot rank with the decorative work of the south, they serve their purpose. Duke Richard I. invited the Abbot of Cluny to come and regulate his disorderly monks, but in vain. The next duke, Richard II., repeated the invitation to William, Abbot of S. Benigne at Dijon, who declined, having heard that the Norman dukes were cruel, and more used to overthrowing churches and driving away spiritual men than building and cherishing them. His scruples were overcome, however, when the duke sent saddle-horses and pack-horses to bring him and his retinue of monks, and he was received by the duke as "an angel from heaven". William was an Italian of Volpiano in Lombardy, and a great builder, and the influence of Lombard architecture was thus introduced from Burgundy into Northern France about the year 1000. In the first half of the eleventh century the great churches of Mont S. Michel, Cerisy-le-Fôret and S. George de Boscherville were built by the Burgundian monk or under his influence in a style that shows a great advance in architecture, and in 1065 the famous Abbey of Jumièges was consecrated in the presence of Duke William I., the conqueror of England. Lanfranc of Pavia had come to Normandy with a train of scholars, where in 1077 he built the Abbey of Bec. Of the same date we have the two great Abbeys at Caen, built by William and his queen Matilda, of which a great part remains in its original state, though much was subsequently altered. Caen and the neighbourhood abound in churches of early Norman architecture, but after the conquest of England architecture languished in Normandy, the conquerors having transferred their energies to their new possession, and during the immediately subsequent period the only great church that was built in Normandy was the Cathedral of Bayeux.

Their simple architecture.

Invitation to the Lombards.

Jumièges.

The Isle of France

The Royal domain during the Romanesque period was confined within narrow limits. When Louis VI. (Le Gros) succeeded in 1108 it scarcely extended beyond the cities of Paris, Orleans, and Bourges, and comprised only the departments of Seine, Seine et Oise, Seine et Marne, Oise and Loiret. The district is not rich in Romanesque architecture for two reasons : it was sacked and ravaged by the terrible Normans in the eleventh century, and later in the twelfth and thirteenth centuries it was the scene of the extensive building operations which have given us the great cathedrals of Central France, involving the destruction of the preceding buildings of Romanesque times.

The new period begins with Abbé Suger and the church of S. Denis, which will be described in a subsequent chapter.

CHAPTER X

ENGLISH ROMANESQUE—THE SAXON PERIOD

THE Roman legions left Britain, and the Britons were abandoned to themselves and their enemies in 411 in the reign of Honorius. The Romans had been here and governed the island for nearly 400 years, and naturally left many traces behind them, as well in the civil constitution of the towns as in the arts of civilized life. The country was dotted with Roman villas; Colchester, Lincoln, Gloucester and York were *Coloniae*; Verulamium was a *municipium*;[1] Gildas enumerates twenty-eight cities besides some castles, and in the towns Latin, it is said, was spoken, and even becoming the vernacular tongue. Excavation at Silchester has revealed a British Pompeii, and at Caerwent, Wroxeter and elsewhere extensive remains have been discovered, and more await us. Bath has ruins of Roman baths that may even be described as splendid, and the rich Roman pavements discovered in London, at Bignor, Brading and in all parts of the country speak of refinement and even luxury in private dwellings. Even as late as 1188 the ruins of Roman architecture at Caerleon-upon-Usk, the old *Urbs Legionum*, surprised Giraldus Cambrensis, who speaks of remains of splendid buildings, old walls still standing, and, what especially interested him, hypocausts and channels for heating the rooms.

Britain as left by the Romans.

Very little Roman work survived the inroads of the heathen Saxons, and Gildas, writing in 564, describes the

[1] Haverfield, *Romanization of Roman Britain*, p. 57 (Oxford, Clarendon Press).

country as laid waste, the cities deserted and ruined, not only by foreign outrage but by civil war among the British chiefs. The new English conquerors were a rural not a town-loving race, and they had no use for the Roman buildings. Such as they put up for themselves were of wood, and their word for building was *getymbrian*. By the time they were settled and began to feel the need of architecture we must imagine that there was little left of Roman work in such a state as to serve for a model.

Gildas.

To build *more Romanorum*, however, was their ambition as soon as they began to build seriously, though it meant little more than building in stone instead of in wood, or even in turf thatched with reeds. At Greensted in Essex there still exists a humble church of Saxon times built with timber, not perhaps of this early date, but probably the church built to receive the relics of S. Edmund in 1013. In 627 King Edwin was baptized at York in the church of the apostle Peter, which he had hastily built of wood; but soon after, by the advice of the bishop Paulinus, a Roman, he replaced it by a building of stone. This the Saxons proudly called building *more Romanorum*, while that of wood was described as built *more Scottorum*. This early effort was, as might have been expected, not very successful, and Edwin's stone church we hear soon fell into disrepair and had to be restored in 699 by Wilfrid.

The Anglo-Saxon. Greensted.

Edwin's church at York.

The work of Benedict Biscop, who in 674 began to build a stone church at the mouth of the river Wear, marks a great advance. Despairing of finding masons in England, he crossed to Gaul and brought some back with him. Within a year the church was ready for service, and Biscop got glass-makers from France to glaze his windows, who also taught the English how to make glass for themselves. From Rome, whither he made several journeys, Biscop brought back sacred vessels and books and relics, and even persuaded John the arch-chanter of S. Peter's to return with him and teach the English clergy to sing the service.

Benedict Biscop, Monk-wearmouth.

Among his pupils was the youthful Bede, who tells the story.

Among other things brought by Biscop from Rome were many pictures with which he covered the walls of

Fig. 15.—Monkwearmouth.

his church. They would probably be Byzantine, Rome being then under the Eastern exarchy.

Benedict's church at Monkwearmouth still stands, and though it has suffered additions the main fabric is as he built it (Fig. 15).

A great number of churches built in England before the Norman Conquest still exist, whole or in part, in spite of additions and mutilations. They sometimes ended

square at the East or chancel end, which was the form of the ancient Celtic or British church; sometimes they were apsidal, a plan due to Roman influence. The square east end. The proportions were narrow and lofty, the towers tall and unbuttressed. The walls were sometimes decorated with narrow strips of masonry

Barton-on-Humber. Earls Barton.

Fig. 16.

slightly projecting, of which a great show is made in the towers of Barnack and Earls Barton churches in Northamptonshire, Barton-on-Humber (Fig. 16), and at Corhampton in Hampshire. The Saxon church. Earls Barton. Dumpy balusters, turned in a lathe, are a special feature of Saxon work; they are generally set in the middle of the thickness of the wall, with a wide projecting abacus taking the whole thickness of it. Bradford-on-Avon. The most perfect example of a Saxon church is at Bradford-on-Avon, where the whole

building remains, with singular sculptures of angels flying and holding napkins on their extended arms, once evidently placed right and left of a rood, as they appear in mosaics at Palermo and elsewhere.

Saxon architecture suffered from two destructive causes: the ravages of the Danes, who burned houses and churches indiscriminately, and the Norman passion after the Conquest for pulling down and rebuilding all the existing churches on a grander scale. Consequently we have none of the greater Saxon churches, which even won the commendation of the Normans, though they pulled them down to do better.

Saxon style stagnant.

The Saxon style, however, seems to have been unprogressive, for though 464 years passed between the coming of Augustine and the Norman Conquest, there is little difference between the buildings in the later and the earlier part of the period. It had sunk into a kind of Byzantine lethargy, and needed the sharp awakening of the Norman Conquest.

CHAPTER XI

ENGLISH ROMANESQUE—THE NORMAN PERIOD

NORMAN architecture had come to England before the Conquest. Edward the Confessor, during the reign of the Danish kings of England, had been brought up in Normandy, and was more a Norman than an Englishman when he came to the throne; and when in 1050 he resolved to rebuild the Abbey of Westminster on a splendid scale he adopted the familiar style of Normandy. Such a church had never before been seen in England. It had a round apse, transepts with apsidal chapels on their east side, a long nave, two western towers, and according to one account a central tower. Southward ran a long building which still remains, divided by a row of massive pillars down the middle, covered with a cross-groined roof with plain transverse ribs. The effect of this church was to revolutionize church architecture in England. William of Malmesbury, writing less than a century later, says: "The church which Edward was the first to build in England in that kind of design was now emulated by nearly all in sumptuous outlay. . . . Now you may see everywhere churches in villages and monasteries in towns rise in the new style of building."

Edward the Confessor's church at Westminster.

The Normans began at once to pull down the Saxon buildings and rebuild them on a more magnificent scale; and not content with building on the scale of the buildings they had left behind them in Normandy, they planned their English buildings of much vaster dimensions. They began, and within less than a century after the Conquest practically finished, the

Norman rebuilding of churches.

great churches of Lincoln, Durham, S. Albans, Winchester, Gloucester, S. Paul's in London, Norwich and many more, far bigger than any buildings in Normandy. The Abbey at Bath, begun by John de Villula in 1100, was so large that the site of the nave alone contains the present Abbey Church. Every cathedral and monastic church fell before these indefatigable builders and rose again in greater state. And not only the larger churches, but almost every Saxon structure was altered or rebuilt. Most of our old churches in town or village have something to show of Norman Romanesque—maybe only a window slit, or possibly a doorway, perhaps preserved from an older building and reset in a later. When one considers what England was at that time—the difficulties of transport, bad roads or none at all, shortage of building appliances, scanty population, and the demands of labour in other occupations—it is astounding that a people, numbering in the days of William the Conqueror and his son Rufus at the outside not more than a million and a half, should not only have undertaken such a vast enterprise, but actually carried it through ; for Viollet-le-Duc observes that the Normans, unlike the French and other people, never left things half done, but finished them off. But that we have the buildings to testify to the fact it would appear incredible.[1]

Universal rebuilding by Normans.

Their extraordinary effort.

For some time the Saxon style continued side by side with the Norman ; for the bulk of the workmen must have been drawn from the native population. The Norman newcomers would have been soldiers, who would not have put their hands to mechanical pursuits. The towers of the Castle and S. Michael's at Oxford, which were built after the Conquest, must have been built by Saxon hands. Saxon influence also shows itself in the square east ends of the Norman churches of Romsey, S. Frideswide's, S. David's, and S. Cross at Winchester, for the Norman east end was

Saxon work continued under Normans.

[1] The population of England in the thirteenth century is estimated at from 1½ to 2 millions. It was only two millions in the reign of Richard II. (*Social England*, vol. i.).

apsidal, as at Norwich and Peterborough, and at Winchester in the crypt. And in time the national square end supplanted the apse generally throughout the country. Except those that have been mentioned, most of our cathedrals that now end square were originally apsidal, as may be seen by traces which remain of foundations.

The square east end.

The era of rebuilding was started by Lanfranc, the Italian monk of Pavia, abbot of Bec, and afterwards of S. Étienne the Abbaye aux Hommes at Caen, whom William brought over and made Archbishop of Canterbury. In his youth he would have seen rising in his native city, and its neighbours, the fine churches of Lombard Romanesque, and possibly the marble splendours of Pisa and Rome, which he aspired to emulate on northern soil. His new cathedral at CANTERBURY occupied the area of the present nave and the great transept, and reached into the choir beyond the present central tower, where it ended with an apse.

Lanfranc at Canterbury.

A new cathedral was begun at WINCHESTER in 1079 by Bishop Walkelyn, a cousin of the Conqueror. The present cathedral is the longest but one in the kingdom, but Walkelyn's church extended still 40 feet farther west. The transepts remain as he built them, and the piers of the nave within the disguise of Wykeham's work. Also the crypt is Walkelyn's, and with its massive piers gives the original apsidal plan of the east end. There was a central tower which, in spite of its enormous piers, fell soon after it was built, owing, as the superstitious believed, to the fact of Rufus being buried in the choir below, where he still lies. William of Malmesbury, however, sagaciously observes that it might have fallen in any case owing to bad building.

Winchester.

ELY was begun at the same time as Winchester by Prior Simeon, who was Walkelyn's brother, and the western part remains a Norman church, though the work seems rather later than Prior Simeon, and though still Norman is in a more advanced style.

Ely.

WINCHESTER—NORTH TRANSEPT.

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Norwich. NORWICH was begun by Bishop Losinga in 1096 on a superb scale, and still remains a Norman church with an eastern apse and an ambulatory with chapels attached, as at Canterbury and Gloucester.

Durham. DURHAM, with its enormous mass and its three great towers standing on a lofty promontory, round which the river Wear sweeps in a defile, makes a picture unrivalled perhaps by any other cathedral. On this impregnable site the bones of S. Cuthbert had been laid in a Saxon church in 995 by the monks of Holy Isle, after wandering about with them for eight years through fear of the Danes. This church was thrown down by William of S. Carilef, the second Norman bishop in 1093, who began the present building and finished the eastern part before his death. Recent discoveries show that, instead of the usual apse with an ambulatory round it, the Norman church originally ended with three apses, like the churches of the Greek rite, and that the two side apses, corresponding with the aisles, though round within were square without, like some Eastern examples at Salonica and Constantinople, and at Parenzo in Istria.

Peterborough. PETERBOROUGH, though practically a Norman church still, was not begun till 1118 and not finished till the end of the century. But it lags behind the style and is archaic for its date.

Gloucester. GLOUCESTER was begun in 1089 by Abbot Serlo, and dedicated in 1100. It is marked by much originality; and it will appear in the subsequent history that from the Gloucester masons sprang many fresh departures in the course of architectural development. With Gloucester may be classed the great churches of Tewkesbury, Malvern, Abbey Dore and Malmesbury.

Tewkesbury.

Proportions in Norman churches. In all these churches of Norman Romanesque we have of course the same triple arrangement as in France, and with certain differences in Italy, of arcade, triforium, and clerestory. But the proportions differ in different buildings. In the earlier churches much greater importance is given to the

triforium. In Walkelyn's work at Winchester the triforium storey is lofty and the openings widely spaced, but in his brother's work at Ely the triforium stage is very nearly equal to that of the arcade below. At Norwich the height of the triforium storey is practically equal to that of the one below it. The same lofty proportion of the triforium is noticeable in the early Norman churches at Caen in Normandy ; while at Tournay in Belgium the triforium is loftier and more important than the main arcade below it. A much better proportion is observed at Durham, where the triforium is kept within more modest limits. At Gloucester the triforium is reduced to insignificance by the lofty proportion given to the arcade storey. This arcade at Gloucester is singular and impressive. The columns are enormous cylinders with plain round capitals which have no moulding or carving, from which spring round arches in three orders. The style of this arcade seems to belong to a local school, for there are similar massive columns and lofty proportions at Tewkesbury. Something of the same proportion, however, is observed in the transept of Durham, where enormous cylindrical columns with cushion capitals alternate with piers of grouped colonnettes corresponding with the orders in the arch. At Norwich the nave arcade, dwarfed by the great triforium above, once had huge stumpy columns, with twisted flutings round them, but taste seems to have altered and they were cased with colonnettes and breaks to take the arch mouldings above. One of the old cylindrical columns remains exposed, and another can be seen inside the casing which has been partly cut away. At Winchester the Norman piers are broken into colonnettes and reveals for the arch mouldings, but at Peterborough we have single columns alternately round and octagonal, carrying cushion capitals which are broken into a separate capital for each member of the arch above.

Proportion of triforium.

Gloucester.

Durham.

Norwich.

Winchester.

Peterborough.

In all these churches the aisles are covered with cross-groined vaults. They have transverse arches at the

column dividing the bays, but the diagonal rib only appears in the later examples as at Peterborough. In some churches, as at Winchester, the nave has been vaulted in later times, but in the Norman period no attempt was made to vault the great space of the nave; the transepts of Winchester and the nave of Ely still retain their wooden roofs and ceilings, and Peterborough actually has the painted ceiling of Norman date. It was not yet time for the great adventure of covering a nave with a stone vaulted ceiling.

Vaulting in aisles.

Wooden roofs to nave.

Norman Romanesque rapidly progressed from its crude beginning at Canterbury in Lanfranc's nave to a more delicate and refined stage. Lanfranc's choir stood barely twenty years before it was pulled down by Priors Ernulf and Conrad between 1096 and 1110, who rebuilt it, extending it a long way eastwards to enclose a much larger choir. The windows have slender jambs and shafts, the walls are arcaded, and there is an attempt to carve some of the capitals. To the same priors also is due the greater part of the splendid crypt, which is cross-groined with longitudinal and transverse ribs, and has columns, fluted, twisted and scaled, and with rudely sculptured capitals. Their work includes the eastern transept, which has a rose window, and a graceful stair and turret, making together a group of extraordinary beauty.

Progress of Norman style.

Canterbury: the "glorious choir".

Of a later date and style in Norman Romanesque is the Galilee at the west end of Durham Cathedral overhanging the cliff that falls precipitately to the river Wear. It is a three-aisled building of very slender construction, for the coupled marble shafts that originally carried the arches had to be strengthened by the addition of stone shafts in the fifteenth century. The arches are enriched with zigzags, and the effect of the whole is delightfully light and pleasing. It was built by Bishop Pudsey in 1175.

Durham: the Galilee.

Quite at the end of the period of Norman Romanesque

we have the chapel of S. Mary or S. Joseph at GLASTONBURY, where round-arched windows and interlacing arcades, zigzags and billet mouldings are associated with Gothic capitals and foliage *à crochet*. The chapel was consecrated in 1186, and is of course quite an archaism at that date.

Glastonbury.

One of the richest and most attractive specimens of later Norman Romanesque is the tower of Castor church near Northampton, which seems to date from 1124. The ornament however rich, it should be observed, is conventional, mason's work rather than a sculptor's.

Castor.

Sculpture during this period was backward, and at first very barbarous. Nothing can be more childish than some of the earlier attempts at the human figure in the tympana of doorways, or on the capitals. At the same time in conventional ornaments, zigzags, birds' heads, interlacing scrolls with queer beasts in them, and such-like fancies, the sculptors soon acquired marvellous dexterity. Later in the period figure sculpture was successfully achieved at Malmesbury, where the statues of the twelve apostles show considerable imagination. The Prior's doorway at Ely and the doorway of Rochester Cathedral reach a very high level, and will compare favourably with the work of any foreign school. The magnificent doorway of Barfreston has in the tympanum a seated figure of our Lord, within a vesica, surrounded by scroll-work containing crowned heads, angels, foliage and monsters. An arch of three orders encloses the tympanum, all richly carved, the outer one with figures variously employed and each encased in a scroll. This is by a master hand, and equal to anything in Romanesque art.

Norman sculpture conventional.

Figure sculpture.

Barfreston doorway.

Attached to columns in the doorway of Rochester Cathedral are figures of a man and a woman, variously attributed to King Henry I. and his Queen, or to Solomon and the Queen of Sheba, whose figures were commonly placed in such situations at church doors.

Rochester and Ely doorways.

PRIOR'S DOOR, ELY.

ROCHESTER—WEST DOOR.

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Length of English cathedrals.

One characteristic of the English cathedral as distinguished from the French is its greater length. Abroad there are no such long-drawn naves as those of S. Albans, Ely, Winchester or Norwich. This may, I think, be accounted for by the difference of our ecclesiastical constitution. The difference between the regular and secular clergy was less marked here than in France, and there was less friction between them. In England the bishop was usually not only the pastor of his diocese but the abbot of the convent, and the Abbey Church was his cathedral. A solid wall divided the choir of the monks from the nave, as it still does at Christchurch in Hampshire. The nave was devoted to the laity, for whom there would be an altar on the outside, or west side of the screen, and for whom ample provision had to be made. As an interesting example of this dual position of the bishop I may mention that to this day the Bishop of Ely has no throne, but sits in the Abbot's stall.

Greater variety of English churches.

In comparing English and French cathedrals we find in our own greater variety. Durham, Lincoln, Canterbury and York have each three towers, but they are not in the least alike. Wells also has three, but they are quite differently grouped. There is nothing elsewhere like the front of Peterborough; the three spires of Lichfield and the two transeptal towers of Exeter are unmistakable; and so are the central towers of Gloucester, Hereford and Worcester, and the spires of Chichester, Salisbury and Norwich. Nobody can mistake one of these buildings for another; while one may be forgiven if one hesitates for a moment before naming one or other well-known French church from a glance at a photograph.

CHAPTER XII

THE GOTHIC PERIOD

THERE was no break or interruption between the Romanesque and the Gothic styles. Gothic grew naturally and insensibly out of Romanesque; they must be regarded as one art, gradually being developed out of the old Roman work, which for want of means and skill in building had long ago become obsolete throughout Europe and impossible. As in course of time the builders improved in skill, they introduced new ideas which gradually resulted in a novel style, departing ever farther and farther from Roman example. In the East the new art was so distinct that it cannot be said that Justinian's buildings owe anything to Roman example, but are in a style quite original. In the West the new motives, resulting in the great Romanesque basilicas of Jumièges, Winchester, Milan and Worms, show no tendency to revert to the principles of correct classic work, and beyond the round arch they have little or nothing to point to Roman influence. Even in Italy it was the same. Constantine's churches mark a distinctly new departure from classic rule, and succeeding buildings in the Italo-Byzantine style have little in common with Roman work. New ideas inspired these buildings. Christianity was prejudiced against Paganism. The Roman buildings were Pagan, anti-Christian; in the Middle Ages they were supposed to have been built by devils, and were regarded only as useful for old materials or as quarries for masonry or the lime-kiln. No respect was paid to them till the time of Petrarch, who bewailed

Gradual growth of Gothic.

Decline of Roman influence.

Christianity and Paganism.

the neglect into which the monuments of ancient Rome had fallen, and tried to awaken an interest in their preservation. But it was not till after his death that anything like a correct intelligence of the principles of the old Roman art was arrived at.

Roman influence extinct.

At the end of the twelfth century, therefore, the period at which we have now arrived, architecture in western Europe had almost forgotten Roman tradition, and was in the later Romanesque stage, a style full of life and energy, thirsting for fresh ideas, readily welcoming further development, and seeking opportunity for more daring enterprise in construction.

Gradual growth of Gothic.

Gothic architecture came to satisfy this craving. Gradually, insensibly, it grew out of Romanesque; one cannot put a finger on any one date that marks the change. There was a period of transition, which produced buildings of remarkable interest and character, but it was short, and the change from Romanesque into the new style was on the whole very rapid. As usual the new departure originated in a great measure in the pressure of convenience and structural necessity. The vault had always been a great problem for the Romanesque architect. Over his aisles he contrived to construct the quadripartite vault which he inherited from the Roman. The compartments were small, and generally square, so that the vault would consist of the intersection of equal cylindrical vaulted surfaces. The groins or lines of intersection, therefore, were regular and simple, and easy of construction. The nave with its great space defied the vault, and was not ventured upon in Romanesque times.

The vault.

The groin.

Naves with wooden roofs. Their conflagration.

But the architect was not content till he could put a stone ceiling over nave as well as over aisle. His churches with their wooden ceilings were always getting burned. S. Martin at Tours was burned in 997; Chartres Cathedral in 1020; Vézelay in 1120, when over 1000 persons perished; S. Front at Périgueux fell in flames in the same year; nearly all the Carolingian cathedrals during a period of 200 years were burned, we are told, five or six times.

Obviously it was necessary on the ground of safety as well as of architectural propriety that the great naves of the churches should have a stone ceiling to protect them.

But here difficulties innumerable presented themselves. At S. Ambrogio in Milan, as we have seen, the nave is vaulted by a quadripartite vault over a square plan, the bay of the nave being equal to two in the aisle. But this plan of double bays was unusual; in the Romanesque church, as in the Gothic one which succeeded, the length of the nave bay was equal to that of the aisle. Consequently the bay for vaulting the nave (Fig. 17) would be much wider laterally, AB, that is, across the nave, than longitudinally, AC, parallel to the aisle. How was a cross vault possible over this unequally proportioned space?

Difficulty of vaulting naves.

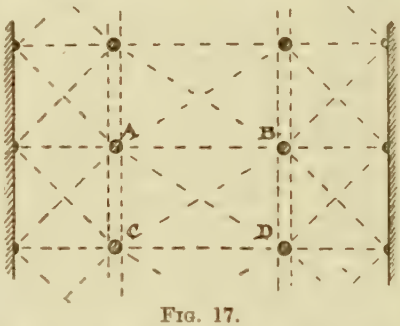


Fig. 17.

At first a cross vault was not attempted, and the nave was covered by a waggon or barrel vault running the whole length of the building. This of course exercised a thrust along the whole length of the side wall. We have seen it in the Auvergne churches, where it is counter-thrust by quadrant vaults over the aisles (Fig. 14, *sup.*). But the construction there is peculiar and not generally applicable. The thrust was resisted at Autun, where the nave is barrel-vaulted, by buttresses at intervals across the aisles, but this occasional support is imperfect, because the thrust is continuous. It became obvious that the nave vault must be a cross vault, so as to bring the thrust down, and concentrate it on the isolated points at ABCD, to which sufficient buttressing could be applied.

The waggon vault.

Cross vault necessary.

The difficulty now was that the arches AB and CD would be much wider than the arches AC and BD, which

would not rise to the same level unless they were very much stilted, and this would disturb the intersection of the two cross vaults and be very difficult to manage. At Vézelay, where Viollet-le-Duc says the first attempt was made to cross-vault a nave, the cylindrical vault from the side arch, which is kept low down and slopes upwards very considerably to intersect with the main or longitudinal cylindrical vault. In other cases the side vaults cut into the main vault much lower down. But these devices were not satisfactory.

Difficulty of plan.

The main difficulty arose from the round arch, which being an inelastic form could not be adapted to irregular heights, and the solution was found in the adoption of the pointed arch, which admitted of being raised to various heights as circumstances required. This overcame the difficulty of the arches, which could now be brought to suitable levels, and be made equal at the crown. But it left the difficulty of the intersection of the curved surfaces of the vaulting worse than ever. These surfaces were too irregular to meet symmetrically on regular lines, for they needed to be twisted and tilted to come together at all, and so it was that the system of strengthening the lines of intersection by ribs was invented. The surfaces could not be brought together except by so much twisting and winding as to be dangerous, and therefore ribs were constructed on the lines of true arches, and the panels of the vaulting were fitted between them, and rest on them securely, even when their surfaces wind. Vaulting thus became a system of ribs and panels ; the ribs forming a framework or skeleton, which is clothed upon by a covering or ceiling of light masonry, which, however, from its arched form has a constructive strength of its own (Fig. 18).

The round arch.

The pointed arch.

Invention of the vaulting rib.

Rib and panel vaulting.

The difficulty of cross-vaulting a nave with oblong bays was thus successfully overcome. It remained to provide proper supports. This was needed only at the four corners ABCD (Fig. 17), on which by the cross vault all thrust was concentrated ; for it is obvious that the walls, AC and BD, have only themselves

The buttressing.

to carry and receive no thrust, which is discharged on the points ABCD, by the four great arches AB, AC, BD, DC, and the diagonals AD-BC. Were there no aisles these points could be buttressed directly, as in King's College Chapel at Cambridge, and the Sainte Chapelle at Paris. But the aisle intervening, the flying buttress was invented to convey the thrust to an exterior buttress beyond the aisle. On the stability of this great outside prop the whole structure of a Gothic church depends.

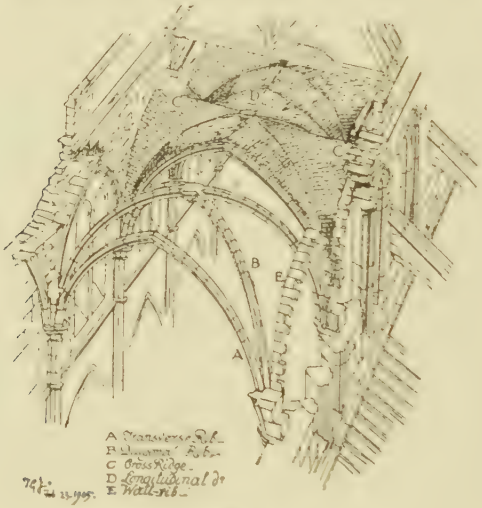


FIG. 18.

The pointed arch thus came in as a structural expedient, and it affected the arches connected with the vault, including the windows. Thence it spread to the lower part of the fabric, the great arcades of nave and aisles, and other constructional features for which its convenience of adaptation to various differing spans made its use, when once invented, a matter of course. But the architects' affections still clung to the old round arch of the preceding style, and we find round arches still used in decorative work, though

The pointed arch in general construction.

pointed arches were used in construction in the same building.

The pointed arch was of course no novelty; it was employed in the East long before its adoption in the West. It is used in the Dome of the Rock and the Mosque of El-Aksa at Jerusalem, which date from the seventh century. It occurs in Coptic churches in Egypt of the sixth century; and the arches of the Mosque of Ibn Touloun at Cairo which was built in 878 are pointed. But there is no reason to suppose that these buildings gave the suggestion of the pointed arch to the architects of the West. The Romanesque builders learned to form their barrel vaults at Arles and Autun of a pointed form in order to diminish the lateral thrust; and it is more probable that the superior advantage of a pointed arch over the rigid semicircular form, in adapting itself to a variety of spans and heights, led to its invention and prompt adoption in the West, than that it was suggested by mere imitation of a pointed form elsewhere, which arose from no such necessities, but was apparently a mere matter of taste.

Pointed arch in the East.

That this is the more likely explanation of the beginning of pointed architecture appears from the fact that at first the pointed arch was used timidly, and that the round arch remained in use, not only in decorative work, as has been already observed, but in constructional features, where no difficulties requiring the pointed arch presented themselves. For instance, the diagonal arches of the vault remained round, though they rose above the transverse and lateral arches which were pointed. And the pointed arches themselves were at first much less acute than they became afterwards as the style advanced.

Pointed arch not borrowed from the East.

For some time the new method, therefore, coexisted with the forms of the older Romanesque style, and there was a transitional stage, an architectural phase of great interest, both in England and France. It was in the latter country that the new style, which we may now call Gothic, first began to establish itself as a distinct development of the architectural art.

The transition to Gothic.

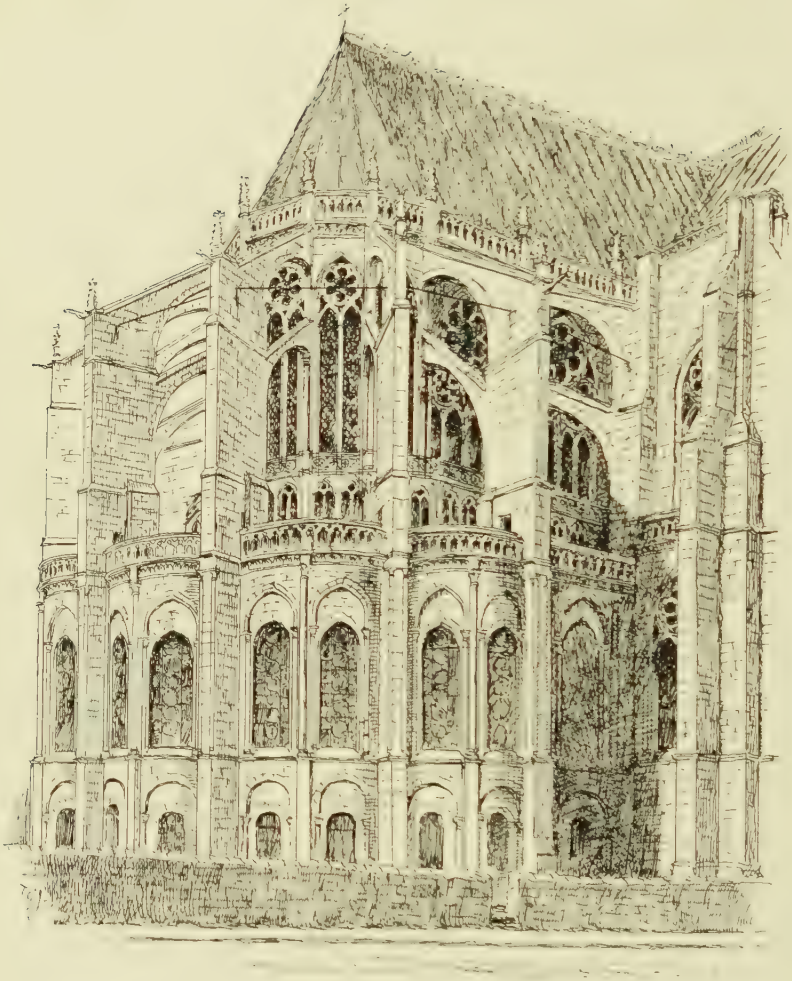
CHAPTER XIII

EARLY FRENCH GOTHIC

THE transition from Romanesque to Gothic architecture began in the Royal Domain of the Île de France; and it is generally admitted that the earliest signs we have of the movement are in the abbey church of S. Denis. The old church founded by King Dagobert in 625 had been rebuilt by Pepin-le-Bref, and again in the eleventh century. But it was small and inconvenient. We are told, no doubt with some fanciful exaggeration, that "the women with much pain, clamour and tumult ran to the altar over the men's heads, as it were on a pavement". The abbot of S. Denis in the twelfth century was the famous Suger, the minister of Louis VI. (le Gros) and Louis VII. (le Jeune), under whose sagacious administration the royal power was steadily advanced and the way prepared for its consolidation in the following reign of Philip Augustus. Suger began rebuilding the church at the west end, which he consecrated in 1140, as he recorded by what he calls an "epitaph" inscribed on the walls. In the same year he began to rebuild the east end of the church, which from the crypt to the topmost vault he finished in three years and three months, as he recorded in a revision of the "epitaph", with the date altered. These two parts of Suger's work alone remain. Whether he rebuilt the intervening part of the church or not is uncertain. It is recorded that he pushed on his building with excessive and injudicious speed, and this part of his work may have failed. At all events it was rebuilt by Pierre de Montereau between 1231 and 1281 in a later Gothic style.

S. Denis.

Abbé Suger.



S. DENIS—EAST END.

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Suger tells us how at the building of S. Denis noble and gentle, freeman and serf, men and women of all ranks harnessed themselves to the cart and drew the stones to the building. He is miraculously helped to discover a quarry at Pontoise which saves him from importing columns from the baths of Diocletian at Rome. Being short of timber he goes to the wood and finds exactly the twelve trees he wanted, and no more. An awful storm threatens the ribs of his vaulting, which, not having the panels filled in, trembled miserably; but the Bishop of Chartres saved them by opposing to the fury of the elements the arm of S. Simeon. This is interesting as showing that no centring was thought necessary after the invention of the vaulting rib.

Miraculous assistance.

In Suger's work round and pointed arches appear side by side. The work in the crypt is still rather primitive and the groining has no diagonal rib, but the French chevet is perfectly developed, with an ambulatory and radiating chapels. The double aisle is divided by cylindrical columns with tall wide-spread bases, and capitals well carved with foliage of a distinctly Byzantine kind, the leaves being sharply raffled and laid within one another in the Eastern manner. The chapels have each two plain, wide, pointed windows, jamb shafts held by bronze rings, and capitals with Byzantinesque foliage. The main apse of the choir from the ground upwards within this crown of ambulatory and chapels is of the late Gothic work of Pierre de Montereau. The same Byzantine feeling as that in the eastern part is shown in the capitals of the western building, which with two bays of the church is also Suger's work. The great west portals were richly carved with Romanesque scrolls, diapers and figures, but little remains of the original work, the greater part being modern, imitative of the old.

Suger's work at S. Denis.

Byzantine feeling.

In the left-hand portal Suger says he placed a mosaic picture, which, "though contrary to the new fashion, I caused to be made here, and fixed in the arch of the doorway". Here it remained till the eighteenth century, when it was replaced by a modern

Mosaic.

sculpture by Brun. There are some mosaics in the Musée de Cluny which may possibly have come from S. Denis. Suger's aim was to rival the splendour of the Eastern basilicas with their wealth of gold, mosaic and precious stones. He tells us in one of his letters that he used to like to talk with pilgrims who had seen the churches of Constantinople and the East, and to ask them whether any of his work would bear comparison with what they had seen there. One reads in Suger's life that he gathered round him "from different parts of the kingdom, workmen of all kinds, masons, carpenters, smiths, founders, goldsmiths and lapidaries, all renowned for skill in their several arts". He watched the work himself with the greatest care, chose the stone and timber, directed the sculpture, gave his subjects to the carver, the glass painter and the goldsmith, and supplied the inscriptions. This zealous devotion to the building of his abbey is the more remarkable because he must have had little leisure for such pursuits. The Abbey of S. Denis was then the political centre of France. In the reign of Louis VI. under Suger's wise statesmanship the royal power over the great feudatories, which had hitherto been little more than nominal, steadily grew into reality, and while Louis VII. was absent on the Crusade Suger ruled the kingdom. S. Bernard, alarmed at Suger's secular occupations, wrote to reprove him for his worldliness. But Suger himself practised the austerities of a monk, inhabiting a simple cell, and observing all the severe rules of his order.

Suger's emulation of Eastern buildings.

Suger's workmen.

His statesmanship.

The fine church of SENLIS is nearly contemporary with S. Denis, and the apse with its shallow semicircular chapels is quite Romanesque. The arches of the interior are pointed, and the triforium has a vaulted ceiling. There are two western towers, of which one only rises to the height of the nave and finishes with a pyramidal roof, while the other is crowned by a splendid steeple of later work, one of the wonders of French Gothic.

Senlis.

Viollet-le-Duc remarks on the haste with which Suger

pushed on his building at S. Denis, and suggests that he anticipated the decline of the monastic system, and wished to show that, instead of decrying architectural effort with S. Bernard and the Cistercians, whose restraints on it were becoming distasteful, the religious orders should show themselves "in the van of progress and new ideas, and lead the way to a display of art hitherto unknown". Certain it is that at this time the influence of the secular ecclesiastic began to prevail over that of the regular. Till the end of the twelfth century the monks had held the highest place in popular esteem. Theirs was thought the higher life, and they were the repositories of learning and had the charge of education. Pontifical bulls favoured them at the expense of the bishops, with whom the exemption of the regular clergy from episcopal control was a sore grievance. Constant feuds and frays with bloodshed occurred between the convents and the bishops who tried to assert their jurisdiction over them. The abbots had become great feudatories with enormous revenues. Their churches outshone the cathedrals, which till the thirteenth century were of modest dimensions like those of Avignon, Autun, and other places where the old cathedrals have survived. The cathedral of S. Étienne at Périgueux was a very humble affair compared with the great abbey of S. Front. No church in France could compare with the vast abbey of Cluny.

Suger's motives.

Decay of monasticism.

Monastic privileges.

Hostility of the bishops.

Greater splendour of monastic churches.

But the thirteenth century was the time not only of the decline of monasticism, but of the rise of the Commune in France, as had already taken place in Italy. Everywhere towns increasing in population and wealth were succeeding in extorting charters from their feudal lords, whether noble, bishop or abbot. Sometimes they sought the help of one of these powers against another, as when the town of Vézelay was encouraged and helped by the Comte de Nevers to sack the convent. Bishops granted charters and revoked them, for which the townsmen of Laon murdered their bishop; at Sens the abbot of S. Vif was murdered by

Rise of the Commune in France.

the townsmen on a similar account. Naturally the new Commune was an offence to all feudal lords, especially to the regular clergy. "Commune! name novel, name detestable", cried the abbot of Nogent in horror.

In one thing, however, the Bishop and the Commune were ready to co-operate, and that was in rebuilding their cathedrals to be a monument at once of Episcopal supremacy and of the greatness and liberties of the city. Everywhere, especially in the royal domain, the old cathedrals were pulled down and rebuilt in the new style, of much larger dimensions and with much greater splendour. This astonishing burst of cathedral building can only be compared with that which has been described of the Normans in England, during the reigns of William I. and William Rufus. In the reign of Philip Augustus, from 1180 to 1223, were founded new cathedrals at Paris, Chartres, Bourges, Laon, Soissons, Meaux, Noyon, Amiens, Rouen, Cambrai, Arras, Tours, Séez, Coutances and Bayeux, and before the end of the century they were nearly all finished.

The new cathedrals.

Astonishing outburst of cathedral building.

The architects during the early days of monastic pre-eminence had been clerics: they were now laymen. The cloister was no longer the only place where the peaceful arts could be practised. Guilds of artisans were formed in the towns, with rules and traditions of their own. Not many names of architects, it is true, have come down to us from these days, but those whose names have survived seem mostly to have been laymen. Occasionally an architect is styled *Frater*, etc. etc., as if it were exceptional.[1]

The architects laymen.

The cathedral of Sens (Fig. 19) was begun in 1143 and finished, with the exception of the west end, in 1168. It is in the Gothic style, thoroughly developed. The arches are pointed and spring from clustered piers alternately with cylindrical columns, which are doubled in pairs. The articulation here is like that at S. Ambrogio, the double bay of the nave from one clustered pier to the next being equal to two bays of the

Sens.

[1] See further as to this my *Gothic Architecture*, vol. i. p. 59.

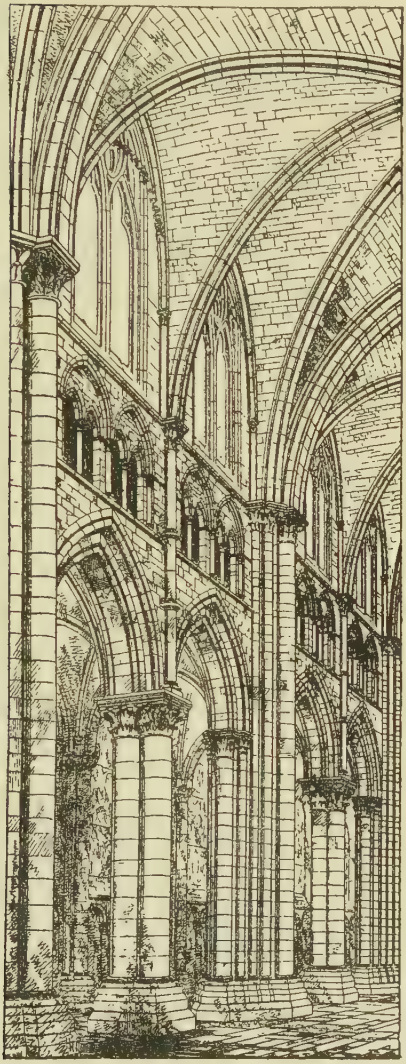

FIG. 19.—Sens Cathedral.

aisle, which are marked by the coupled pair of columns. This double bay, as at S. Ambrogio, is covered by a single vault which is sexpartite instead of two quadripartite vaults, the usual arrangement. The sexpartite vault, however, needs explanation (Fig. 20).

Sexpartite vaulting.

The plan ABCD, with the diagonals AC-BD, has what would be a simple quadripartite vault, as at S. Ambrogio, with two equal intersecting cylinders, but for

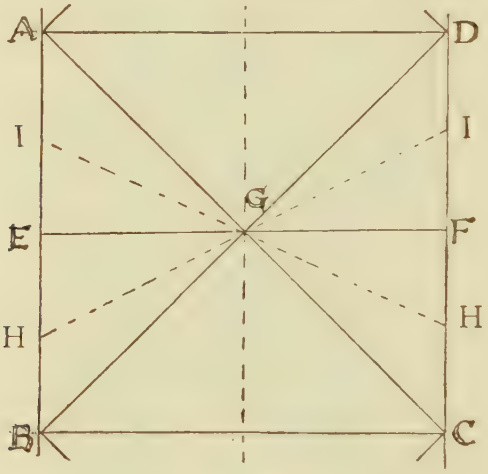

Fig. 20.

an additional rib EF thrown across from the intermediate coupled columns of the aisle. This intersects at the crown with the two ribs of the quadripartite vault at G. From this rib EF are thrown right and left panels of vaulting meeting those of the main ribs, and forming with them two ridges, running from G to the central points of the half bays GH and GI. The bay of the vault thus becomes sexpartite instead of quadripartite.

The interior has wall-piers and wall-arcading of a semi-Romanesque character. The west portals are rich

with imagery, and the shafts stand on a lofty basement with three tiers of panels above the plinth, filled with strange beasts and figures from the bestiaries, a never-failing source of inspiration to the mediaeval carver. Among others is a skiapod, one of those curious people of whom Pliny tells us, called *Monosceli*, who have one leg, are wonderful jumpers, and in summer lie on their backs and use their foot to shade them from the sun.

Sens.

The bestiaries.

The carving on the piers of the portal has scroll-work, with still a reminiscence of classic ornament as in the preceding period, but with some fore-shadowing of the natural foliage that was to come.

The cathedral of NOYON (Fig. 21) was begun in 1150 after a disastrous fire which destroyed the town and an older cathedral in 1130. It is, or was—for it has been badly wrecked by the Germans, and I do not know its present condition—one of the finest in France, and none other showed better the transition from Romanesque to Gothic. It is on a grand scale, and has, like Senlis, a vaulted triforium. When this occurs the triforium gallery no longer occupies the space between the aisle vault and a lean-to roof, for the roof has to be raised to allow of the vault over the triforium, and there is a second triforium, as it were, represented by an arcade in the nave above the first. The transepts are apsidal, and the apsidal choir has an ambulatory with five apsidal chapels. The windows are plain lancets, and outside the chapels are attached colonnettes and buttresses, a survival of Romanesque tradition. The nave, though covered with quadripartite vaults, seems to have been prepared for a sexpartite vault, having clustered piers alternately with columns that are monocylindric and have well-carved capitals of a simple type.

Noyon.

The vaulted triforium.

The second triforium.

The west front, with its two towers and the later projecting portico, is particularly fine.

In the churches so far described, S. Denis, Senlis and Noyon, Viollet-le-Duc says we may see the "cradle of Gothic architecture". In them the Romanesque tradition

was not entirely forgotten : round and pointed arches appear side by side, primitive sculpture, with some that is

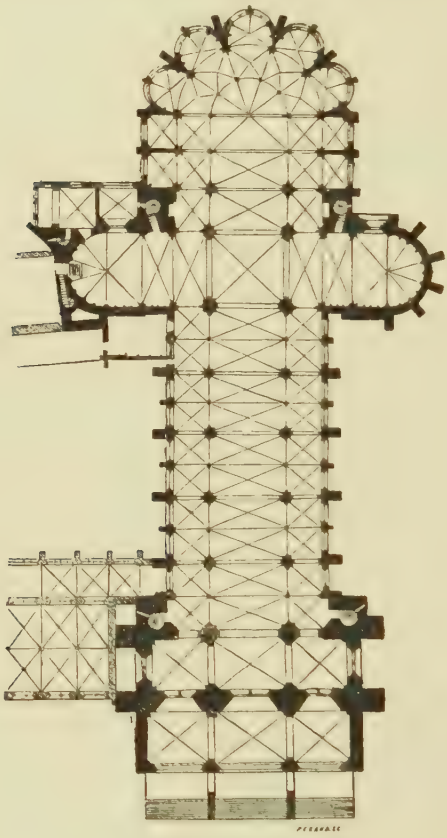

Fig. 21.—Noyon Cathedral.

more nearly based on nature, but all pointing unmistakably to the more settled style that was to follow.

CHAPTER XIV

FRENCH GOTHIC

In 1163 Bishop Maurice de Sully began to build the new cathedral of Notre-Dame at Paris. He began at the east end, in order to avoid disturbing till it was necessary the old cathedral which stood farther west. At his death in 1196 the choir and transepts were finished. The nave, except the towers, was

Notre-Dame, Paris.

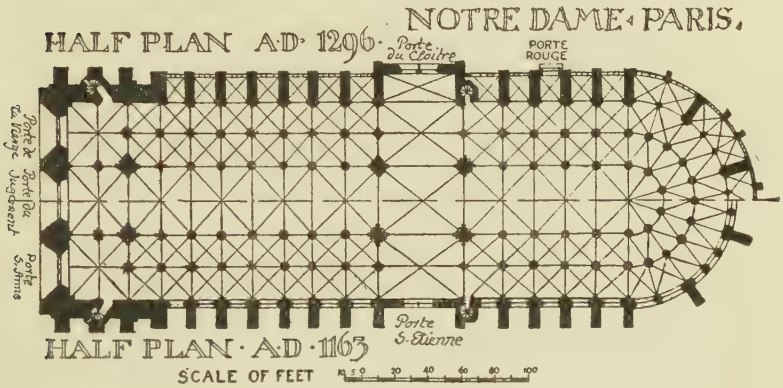

Fig. 22.

finished by the death of Philip Augustus, and the whole church, including the towers, was completed between 1235 and 1240.

The original plan (Fig. 22) was a simple basilica with a shallow transept and a double aisle on each side carried round the east end. There were at first no chapels between the exterior buttresses. They were added in

1296 by Bishop de Bucy, and the transepts at the same time were lengthened by one bay. All the columns are cylindrical, and though the nave has a sexpartite vault no difference is made in the colonnade. The capitals are well carved with foliage that hits a happy mean between nature and convention. The bases are of the Attic type, and are of a singularly delicate and refined section, with quite a Greek profile.

The triforium opens to the nave with a triple arcade and is vaulted. This involved raising its roof, as was done at Noyon, and there was originally a second quasi-triforium, lit by round openings to the nave with radiating mullions (*v.* Fig. 23). This allowed only very small clerestory windows, and was all removed not long afterwards: the clerestory windows were then lengthened, the triforium roof was lowered, and the bay altered as we now see it. M. Viollet-le-Duc has preserved in one or two bays the original arrangement with the round opening and the wheel tracery.

Original elevation of nave.

The west front is perhaps the most satisfactory of all the great French façades. It has more breadth and simplicity than the others, and the strong horizontal lines given by the great frieze of the kings above the portals, and the arcaded stage from which the towers rise above the great windows, redeem it from the weakness of a too vertical treatment. The towers themselves are beautiful in detail, admirably proportioned and outlined. They were no doubt intended to carry spires, but I think it fortunate that we have the towers as they are, without them.

West front.

To appreciate the great advance made by architecture in the royal domain it must be compared with the contemporary work in the provinces; with the Romanesque and semi-classical details of Vézelay and Autun, the round-arched and barrel-vaulted churches of Auvergne, the portals in progress at Arles and S. Gilles, and the domed building just being completed at Périgueux. At Notre Dame in Paris the conception of Gothic was thoroughly grasped, and it only wanted full development in succeeding buildings.

Great advance in Île de France.

PLATE XXI.

NOTRE DAME, PARIS.

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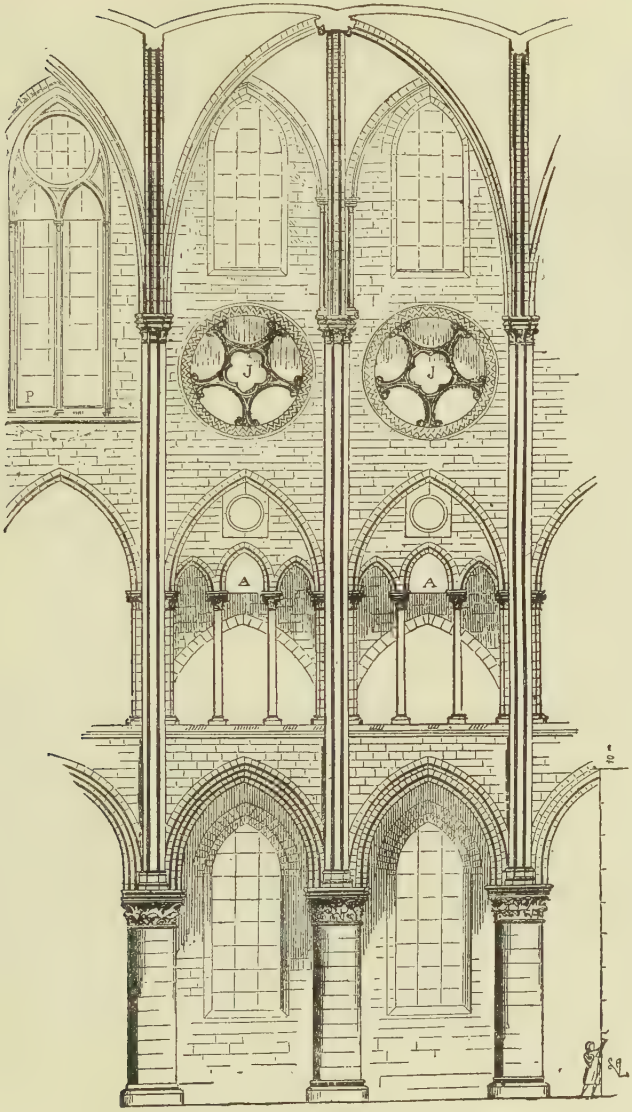

Fig. 23.—Notre Dame, Paris.

The cathedral of Laon is nearly coeval with that of Paris, being built in the last quarter of the twelfth century. It was begun in 1160. By 1205 it was practically finished, ending with an apse, two bays beyond the central crossing. This was afterwards destroyed and the choir carried considerably further, where it finishes, contrary to the usual French fashion, with a square end. The design was unusually ambitious: there were to have been seven towers, two at the west end, two at each transept, and one over the central crossing. Five of them were really built, and the lower part of the other two, at the transepts, exist up to the roof of the church. No cathedral in France has a finer exterior effect than Laon, on its mighty hill with its five magnificent steeples. The general finish of the work has not the refinement of the Île de France. The foliage of the capital is conventional and simple; the details are rather heavy and the mouldings of the bases clumsy. But the whole is virile, and full of life and energy. The central lantern, which is general in English cathedrals and occurs in Normandy, is unusual in France.

Laon.

The design of the towers at the west end and at the transepts is very original. Up to the nave roof they are plain, and the upper part is octagonal, with tabernacle work on the angles of the square, of light arcades on detached columns, some of them containing stairs. From among the colonnettes of the western towers look out figures of oxen, to commemorate the legend of a miraculous ox, which volunteered to draw building materials during the construction. These towers evidently made a great sensation at the time they were built; Wilars de Honecort sketched them while they were building, and wrote against his sketch that he had never seen a tower to equal them.[1]

The towers.

Laon.

The fine church of S. Martin at Laon has a square east end like the cathedral.

The cathedral of Soissons has a beautiful south transept in which we have the Gothic style thoroughly

[1] "En aucun liu onques tel tor ne vi com est cele de doon" (Wilars de Honecort, ed. Willis, p. 57, plates lxvii.-lxviii.).

[N.D. Photo.

LAON CATHEDRAL.

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developed. It is apsidal, like those at Noyon, but much more advanced in design. Strong clustered piers take the vaulting, with triple arcades between them in the lower and triforium stages. Above is a second triforium with open arches, and a clerestory of three lights above.

Soissons.

The cathedral of BOURGES, begun at the beginning of the thirteenth century, is planned very like Notre Dame at Paris, but has no transept. Both have a nave with sexpartite vaulting, and a double aisle round the apse; but there the resemblance ceases. At Bourges the inner arcade is very lofty, and the triforium and clerestory are unduly lessened and seem crushed up against the vault; the object of this is to allow the triple arrangement of arcade, triforium, and clerestory in the next aisle, for the sake of which the outer aisle is kept very low. The omission of a transept giving a long unbroken vault over the central nave and choir is very fine, but too much has been sacrificed in order to get a view from the nave of the three stages in the inner aisle, and the columns of the central arcade seem unduly drawn out and prolonged.

Bourges.

The side porches of Bourges are extremely beautiful, and the Romanesque doors they protect have some scroll-work on the lintel that is deliciously delicate and refined. The porch has a double arch; in the moulding round one arch are owls, and round the other monkeys.

The porches.

The choir of LE MANS, which was built about 1220, at the end of the Romanesque nave, is like Bourges, with a double aisle round the apse, of which the inner has its own threefold arrangement of arcade, triforium, and clerestory.

The cathedral of CHARTRES had been rebuilt by Bishop Fulbert in 1028. The two western towers were built between 1145 and 1170. The southern of the two was finished with its superb Romanesque spire, but the northern had only a wooden roof. The Romanesque tower and spire in their stern magnificence are unrivalled. Unlike the steeples of our country, and

Chartres.

of Normandy which resemble them, it has no marked division between the tower proper and the spire. One does not know quite where to place it, and to say exactly where the tower ends and the spire begins. It rises from the ground like one great unbroken conical structure, where one part melts into another without interruption. The spire proper springs from the top of an octagonal stage that surmounts the square tower, but is surrounded by pedimented structures, which are in the planes of the sides of the square tower, and might be considered to belong to it ; though I think the spire really includes them.

The S.W. steeple.

These towers originally stood out from the west front of the church, and the present west portals were placed in a line with the eastern side of the towers, which therefore stood clear on three sides. The portals were soon afterwards removed forward to their present place flush with the western side of the towers, and so escaped the fire which destroyed the cathedral in 1194. The south-western tower also escaped, having nothing to burn, but the other lost its wooden roof, which was replaced by Jean Texier's beautiful spire in the sixteenth century.

The west portals brought forward.

The west or Royal portals therefore are older than the church behind them, and date from 1045–1170, and they mark an epoch in French sculpture. There are three arches, pointed and enriched with sculptures in niches. On the central tympanum is our Lord in a vesica with the four apocalyptic beasts, in the left tympanum the Ascension, and in the right one a Madonna and child. But the most remarkable sculpture is in the jambs, which are lined with figures attached to shafts, of which they indeed form part, and drilled into columnar form themselves, scarcely exceeding the width of the shaft at their back, with their draperies in straight folds down to the feet. In this there is nothing barbarous ; and the faces are admirably modelled and carved and have all of them the air of being actual portraits. The head of Christ on the middle tympanum is extraordinarily fine and natural. The excellence of the heads

The Royal portals.

CHARTRES—WEST PORTAL.

(Reproduced by permission from Marriage's *Sculptures of Chartres Cathedral.*)

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and of some of the hands proves that the conventionality of the figures is not the effect of incapacity in the sculptor, but it would seem that the drilling of the figure into its column form was deliberate and intentional, with a view to the architectural effect.

The rebuilding of the church after the fire of 1194 was pushed on with energy, and practically finished in 1212.

The nine steeples.

The original conception was magnificent. Laon was to have had seven towers, Chartres was to have had nine : two at the west end, two at each transept, two on the line of the chord of the apse, and one over the crossing. The central tower, however, was not built, and the other six only reached the eaves of the church. Only the two western ones exist.

The architectural style is in advance of that at Paris and Bourges. The vaulting is quadripartite, the vaulted triforium gallery has disappeared, the round arch is finally gone, and the clerestory is large, consisting of two lights with a circle of plate tracery in the head. The glory of Chartres is the glass, which fills every window with the richest hues of the ruby, the emerald, and the sapphire. That of the triplet in the west front is of the twelfth century, and was moved with the old front ; the rest is of the thirteenth century.

Advance of the architecture.

The glass.

The proportion of the interior is very happy. It has neither the depression of Paris and Rouen nor the extravagantly high proportion of Amiens. There is a new proportion between the three storeys of the bay, resulting from the abandonment of the vaulted triforium, which gave more room for the other two storeys. The clerestory is unusually lofty, and has a fine effect in the apse, and the arcade is much higher than that at Paris, which is too low, and not so lofty as that at Bourges, which is too high.

The proportion.

But the great glory of Chartres is the triple porch on each transept, which, especially that on the north, may claim to be the finest works of French thirteenth-century architecture, both in general architectural design and in wealth and beauty of sculpture.

The porches.

The south porch is said to have been begun in 1224, and the north one in 1250. Statues flank the doors, circle round the arches, and are moulded into the piers, and the whole is enriched with miniature figures, diapers and foliage. It is said there are 700 figures in the northern portal alone.

Reims.

Of the cathedral of Reims (Fig. 24) one must write in the past tense. The Germans have succeeded in their object of reducing it to a wreck.

The cathedral of Adalbéron, who in 976 is said to have filled the windows with painted glass, was burned down in 1210. Rebuilding was begun in the year following and pushed on with vigour till 1241, when the chapter took possession of their new choir. But funds were exhausted in 1251 and the building was heavily in debt. It was not finished till the fourteenth century, nor the towers till 1427. A labyrinth in the floor of the church, which was destroyed by the Canons in 1778 because children amused themselves by running round the maze, preserved the names and figures of four successive architects of the building. Fortunately the inscriptions have been recorded, from which it appears that the original design was due to Jean d'Orbais, who built the eastern part with the beautiful chapels, and was followed by Jean de Loup, who made the transept portals. He was succeeded by Gaucher de Reims, master for five years, who was followed by Bernard de Soissons, master for twenty-five years, " qui fit cinq voutes, et ouvra a l'O ", the great rose window of the west front.

The architects.

The sketch-book of Wilars de Honecort has five sheets of drawings of Reims cathedral showing the work in progress.

The ground plan is simple ; the double aisles of Paris and Chartres are abandoned ; there are no chapels between the buttresses, and the flank of the church with the buttresses fully exposed is very fine and impressive. There is a stern simplicity in the interior. The foliage of the capitals gradually increases in naturalism as the work advances westward, and in the

The plan.

famous vintage capital is mixed with figures; but the capitals of the latest stage westward are confused and inexpressive.

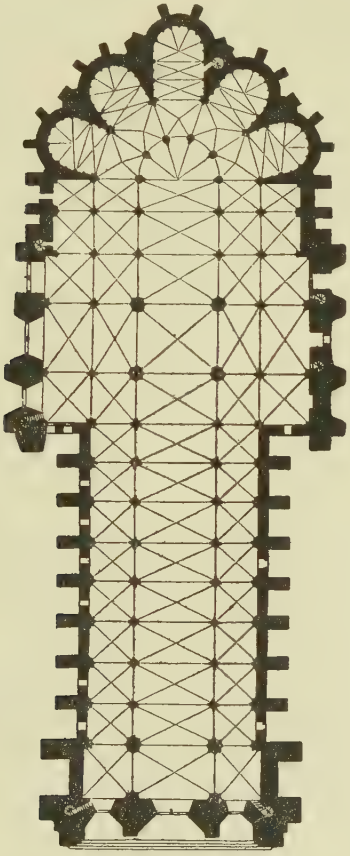

Fig. 24.—Plan of Reims Cathedral.

The vault.

The vaulting was quadripartite, the transverse rib being accentuated, and the construction throughout was masterly. The ritual choir was continued into the three bays west of the crossing, no doubt

to afford more space for royal coronations, for it was at Reims that the French king was crowned.

The choir chapels were incomparably the most beautiful of their kind, and evidently made a great impression at the time they were built. Wilars de Honecort writes opposite his sketch of them: "This is how those at Cambrai must be if they are made right". They are the complete development of the tentative designs at Senlis, Paris, and Chartres, and the chapels of succeeding buildings are only variations of the example set at Reims. Their windows are perhaps the earliest in which bar-tracery was fully developed. But the subject of tracery must be reserved for another chapter.

The eastern chapels. Wilars de Honecort.

Except for the upper part of the towers, the west front was finished at the end of the thirteenth or beginning of the fourteenth century. The spires which were intended on the towers were never built, and indeed the construction of the later upper part seems too frail to have carried them. There are the usual three portals, but their tympana are traceried and glazed instead of having the usual sculpture.

In the sculpture of the figures that flank the portals the art of the Middle Ages reached its highest achievements. It has produced nothing finer than the four figures in the middle portal, of the Annunciation and the visitation of Mary and Elizabeth. The simplicity of the figure of the Virgin in the first group, and the irresistible charm of the smiling angel, are only surpassed by the other pair, which are by a different hand and are comparable to the antique.

The sculptures.

I write of these as if they were still in existence, which I fear is impossible.

[*Photo, F. Rothier.*

REIMS CATHEDRAL.

To face page 118.

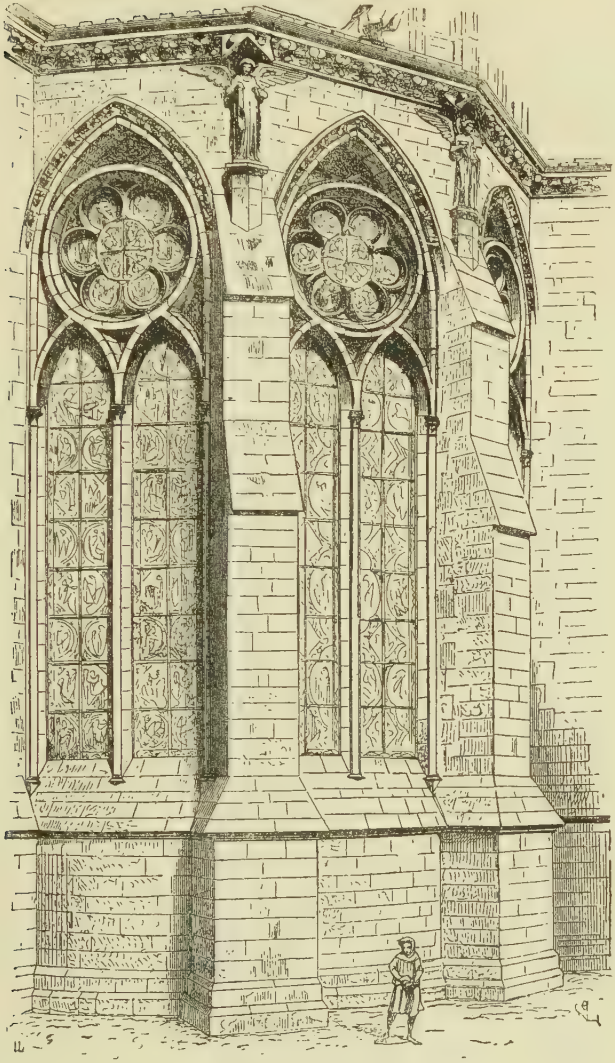

Fig. 25.—Apsidal Chapel, Reims.

CHAPTER XV

FRENCH GOTHIC—*continued*

THE cathedral of AMIENS was begun in 1220, the same year as that of Salisbury in England (Fig. 26). It is generally regarded by writers on architecture as the perfect flower of French Gothic. It is planned on an enormous scale, and finished with the most lavish profusion of design both within and without.

Amiens.

The work was begun at the west end, instead of as usual at the east, probably in order to spare till the last the old church of S. Firmin, which stood on the site of the present choir. The nave seems to have been occupied in 1236, and the choir with the chevet of apse and radiating chapels was finished, after various suspensions for want of funds, in 1269. The upper part of the west front, above the rose window, dates from 1366, and the north tower was finished in the fifteenth century. A labyrinth, or " House of Daedalus ", in the floor, destroyed in the nineteenth century and now represented by a copy, had an inscription in brass recording the foundation of the church in 1220 by Bishop Evrard and King Louis ; the first architect (maistre de l'œuvre), it continued, was Maistre Robert de Luzarches ; after him came Maistre Thomas de Cormont, and then his son, Maistre Regnault, who says he placed this inscription here in 1288. The figures of the bishop and the three masters of the work were inlaid in the centre in white marble.

The architects.

Chapels were afterwards added between the exterior buttresses, but originally the plan was very like that of Reims, and the nave had only a single aisle on each

side. The vault is quadripartite. The columns are cylindrical with attached colonnettes; the bases are well profiled and a good example of the Gothic version of the Attic base. The wall ribs of the vault are much stilted to allow of very

Addition of chapels. Proportion of interior.

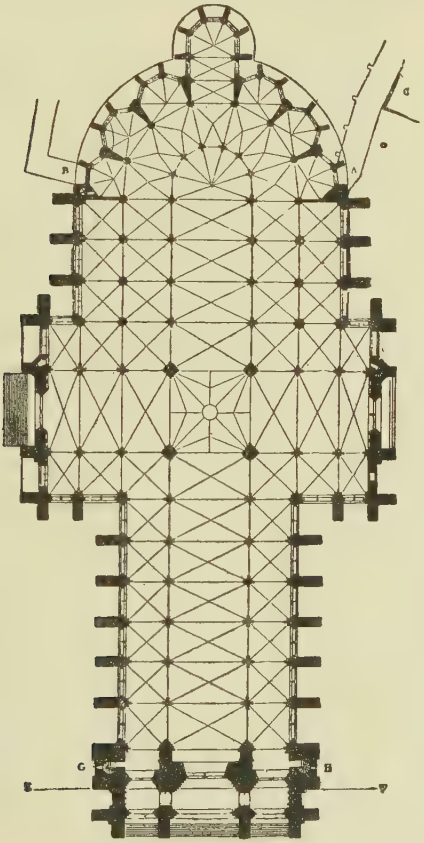

Fig. 26.—Plan of Amiens Cathedral.

large clerestory windows of four lights in the nave and six in the choir and transept. This vast increase

of window space is the last achievement of the Gothic system of construction, by which the curtain walls, between the piers which take the converging thrusts of the cross vaulting, are reduced to the utmost, and the windows of the ground storey and the clerestory extend almost from pier to pier.

Increase of window space.

The choir, which is later than the nave, is by a different and, I think, an inferior hand. Probably Robert de Luzarches was dead and de Cormont had succeeded him. The clerestory is increased in width; the back wall of the triforium is pierced with tracery and glazed; on the inside the triforium is surmounted by an ugly and unmeaning pediment; and the flyers of the buttresses are united by tracery which spoils them. The spacing of the columns in the apse is inferior to that at Reims or Chartres, and they are crowded too close together, their narrowed arches contrasting badly with the enormously wide-spread bays of the choir. This crowding of the east end, which affects the chapels, spoils the exterior view of the apse, which is smothered in its supports.

The choir.

The apse crowded.

The west front, which is the work of de Luzarches up to the top of the rose window, is a masterpiece: certainly superior to that of Reims. In splendour of sculpture there is not much to choose between them, but there is nothing at Amiens to rival the groups of the Annunciation and Salutation at the other church.

West front. The sculpture.

In comparing these great buildings, as M. Durand says, "it would be childish to inquire which to place first. Still," he continues, "what nobody will deny to the cathedral of Amiens is that it is the monument in which the Gothic art has displayed the plenitude of its system and its resources, where it has most closely approached its ideal, where decisive solutions have been found, and where, in a word, we have the type of Gothic construction."[1]

Amiens the perfection of Gothic theory of construction

This is quite true. We have here in perfection the

[1] *La Cathédrale d'Amiens*, G. Durand.

AMIENS—WEST FRONT.

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system of stability by thrust and counter-thrust: the points of support are isolated, and the curtain walls between them are practically reduced to windows. Each feature has its own logical development, and each has its own proper support. Every problem of Gothic construction is solved, and nothing remains to be done by way of further development.

Perhaps it is this very perfection that to some extent robs Amiens of its interest. One misses the youthful vigour and the obvious effort of the earlier work; and the satisfactory triumph over every difficulty, while it extorts approval and admiration, nevertheless somehow leaves one cold. The interior seems too fine spun, too much drawn out, too lofty for its width; the triforium is poor and shadowless; the crowded arcade of the apse with its pinched-up arches is ill-proportioned, while the choir triforium I think positively ugly.

Lastly, while admitting that at Amiens one has the full development, to its extreme limits, of the Gothic system of construction, involving the diminution of the points of support to the utmost and the expansion of the voids to the fullest extent possible, one seems to be leaving architecture for engineering; to be steering too near the margin of security; to be trusting too much to the absolute soundness of every member in a complicated system of thrusts and counter-thrusts, where if one member failed wide-spread disaster would follow.

Architecture and engineering.

From the perfection of Amiens one turns with a feeling of relief to the earlier Gothic and the Romanesque buildings where economy was not pushed so far, and where construction was not limited to the least that would do, but had something over and to spare.

As a matter of fact, Amiens Cathedral has had to be secured by iron ties running along in the gallery the length of the nave.

For me, Gothic architecture and Gothic construction reached its climax at Reims and not at Amiens.

From Amiens one turns naturally to Beauvais. Here in 990 Bishop Hervé built or rebuilt a cathedral, of

which the nave, known as the *Basse Œuvre*, still exists.

Beauvais.

This church was injured by fire in 1180 and 1225, and in 1227 Bishop Milon de Nanteuil resolved to build a new cathedral. The present choir was begun in 1247.

By this time the nave of Amiens was finished and the choir well in hand, and the men of Beauvais were inspired to build something not only to rival but to surpass the work of the neighbouring city. The vault of Amiens was 141 ft. high; that of Beauvais should be 13 ft. higher. The construction should be audacious to rival that of Reims. But alas! the vaults were no sooner built than they fell for want of proper abutment. They were rebuilt in 1272, only to fall again in 1284, and then the builders introduced additional columns to halve the span of their wide arches. These works occupied forty years, and the transepts had to wait till flamboyant times in the sixteenth century. A new nave was projected and actually begun when a fresh fit of megalomania attacked the people of Beauvais. This time they were provoked to rivalry by the dome of S. Peter's at Rome, and they built over the crossing a gigantic tower 500 ft. high, to the top of which you could look from the floor through an opening in the vaulting. This stood for twenty years and then fell in 1573, bringing down with it a good deal of the transept and choir.

Fall of vaults.

Additional columns.

Fall of tower.

Beauvais, therefore, is only a fragment of a design too vast to be realized. But it is not, as might be imagined from its history, extravagant and affected. On the contrary, it is extremely beautiful. The outside of the choir is restrained and chaste in design, but the interior has no rival in France, and it owes this partly to design and partly to accident. The effect is not owing to the enormous height of the vault, though that is impressive too, but to the fine proportion of the section of the building; and nothing is more happy than the effect of the introduction of additional columns between the original ones in 1284. They bring the width of the side arches of the

Beauty of Beauvais.

Happy construction of apse.

PLATE XXVI.

BEAUVAIS CATHEDRAL.

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choir more nearly to that of those round the apse, and thus Beauvais escapes the violent contrast there is at Amiens between the cramped arches of the apse and the wide-spreading arches of the choir which adjoin them. The interior looking eastwards seems a mere lantern of lofty windows set in light piers of masonry, for the lower windows of the apse are seen through the arcade, and the triforium is glazed outside, and continues the light of the great clerestory windows down to the head of the arcade.

Very few interiors leave an impression of beauty that dwells so strongly in the memory as that of Beauvais.

S. Denis.

At S. Denis in 1231 the monks set about rebuilding the body of their church. They retained of Suger's building the lower part of the east end, comprising the apsidal chapels and the aisle from which they spring, together with the crypt below, and also the west end with the narthex of two bays adjoining it. All the nave and choir between these two parts were now built or rebuilt by Pierre de Montereau ; but we are not told whether this involved the destruction of any building by Suger, or whether he had left the central part of the church for others to do, and had confined his work to the two ends of the building which remain.

Pierre's work is in the fully developed Gothic manner. The clerestory windows are spread as widely as those at Amiens, and the clerestory and triforium are united by running the mullions down from one to the other. The triforium is glazed on the outside, which gives an extraordinary effect of lightness. The transept is a mere gossamer web of tracery, the enormous rose window resting on an arcade of windows that ranges with the triforium.

Sainte Chapelle.

Pierre de Montereau is generally said to have designed the Sainte Chapelle at Paris, the chapel of the old Royal residence, built by S. Louis to receive the Holy Crown of thorns. It is in two storeys, connected by a winding stair. It was built between 1245 and 1248. The plan is simple : four bays with quadripartite vaults and four-light windows, with an apse. As there is no aisle the walls are buttressed

directly, and the windows occupy the whole width from buttress to buttress.

Bar tracery.

In the windows bar tracery is fully developed without the tentative attempts which are to be seen at Reims. But tracery will be more fully dealt with in a special chapter hereafter.

The west end has an outside porch and a rose window of a later date.

Gothic construction perfected.

With these churches we complete the history of the development of Gothic architecture in Central France; from its tentative beginning at S. Denis and Senlis to Noyon and Sens, and then to Paris and Chartres. At Reims the whole theory of Gothic construction is understood and carried out without weakness; at Amiens it is pushed to the extreme margin of security, which at Beauvais is overstepped.

Decline of the style.

The system could go no further; and except for provincial differences which will be noticed in the next chapter, French churches followed the lead of the thirteenth century, losing its life and vigour, as the need of effort disappeared, losing also all originality and becoming in the fourteenth century dull and mechanical. The vast church of S. Quentin is an example of this. The nave, with a vault 147 ft. high, has a fine effect, but the details are common-place, and the capitals of the arcade are miserably poor, with mere sprigs of foliage planted round them. The tendency was to diminish the solids and increase the voids of the place and to return to simplicity of arrangement. The church of S. Ouen at Rouen is a good example of this type. The plan of the nave with its single aisle and of the short transepts is good, and the apse with only three cants, its ambulatory and chapels, is also excellent. But the detail is disappointing. The main arcade is starved and thin, and the capitals are meagre. The aisle windows are enormous and the supports are reduced to a minimum.

S. Quentin.

S. Ouen, Rouen.

Sculpture during this period became more natural.

There are capitals and cornices in the Portico and Chapter house at Noyon that rival Nature herself. Figure sculpture also tended to portraiture and declined from the sympathetic feeling which made the sculpture at Chartres, Reims and Amiens part of the architecture. But sculpture plays a less important part during this period than before. French architecture misses the chapter of curvilinear Gothic which marks the fourteenth century in England, but has nothing corresponding to it in France. During that period it persisted in the geometrical stage, only becoming more attenuated and losing all life and originality.

Sculpture in fourteenth century.

The century was an unhappy one for France. The country was harassed by English invasion during the Hundred Years' War and ravaged by the Black Death, which is said to have swept away half the population. Few great buildings were erected during this period, and they are of secondary interest. Viollet-le-Duc says: "At the end of the thirteenth century we no longer find the individual stamp which marks each building at the beginning of it. The general arrangement, the construction, and the ornament take already a monotonous aspect, which favours mediocrity at the cost of genius. Science carries the day over art. . . . In spite of the excessive skill and logic which presides over the architecture, it leaves you cold in the presence of its efforts, in which one finds more calculation than inspiration." [1]

Viollet-le-Duc on fourteenth-century architecture.

[1] V.-le-Duc, *Dict. Rais.* vol. i. p. 154.

CHAPTER XVI

FRENCH GOTHIC—THE PROVINCIAL STYLES

HITHERTO we have been considering the architecture of Central France, originating in the Royal Domain of the Île de France, steadily pursuing an ideal form of construction, on a scientific basis, which after many tentative efforts resulted at last in the perfectly logical and theoretically complete construction of the great church of Amiens. It remains to be seen how this supreme achievement of the scientific ideal of architecture affected the rest of France.

Sooner or later it made its way to a certain extent to all parts of the country; but in the south and west it never quite succeeded in effacing the traditional Romanesque and other local peculiarities of those provinces. The Gothic cathedrals of Clermont and Limoges seem out of place, almost impertinent among the far more interesting Romanesque buildings of those parts. And when Anjou and Poitou adopted pointed architecture, as they did at an early date for constructional reasons, the result was a local style full of originality, and quite unlike anything that was going on in Central France, the home district of Gothic architecture.

Gothic style not welcomed in S. and W.

The west was the country, as we have seen, of domed churches, and in the enormously high quadripartite vaults of the aisleless cathedral of Angers we may see the idea though not the construction of the dome. This Angevin, which De Vermeille calls the Plantagenet style, is something quite distinct from other Gothic work, and forms a school of its own. It is well shown by other buildings in Angers. The most important is the great Hôtel-Dieu, or

Domed churches. The Plantagenet architecture.

ANGERS—CHAPEL OF HÔTEL DIEU.

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Hospital, founded in 1153 by our King Henry II. on a magnificent scale. The patients were accommodated in a vast hall, about 200 by 75 ft. in three aisles, at the end of which is a beautiful chapel with a Romanesque cloister, and a granary in two storeys divided into three spans by arcades. The vaulting of the hall and chapel, which is constructed with pointed arches, rests on slender columns with simple carved capitals; but the windows are round-arched, clinging still to the Romanesque ideal.

Angers' Hôtel-Dieu.

The fine church of S. Serge at Angers is in the same style, with pointed arches for the vaulting, on slender columns, and round-arched windows.

S. Serge.

The cathedral of Poitiers is another building in this style. The plan is unusual; it is a hall, divided by arcades into three aisles of nearly equal height, and ending square, with three shallow apses sunk in the thickness of the wall quite in the way of an oriental basilica. Here, too, the arches are pointed and the windows round-headed. The walls have lofty blank arcading with round arches. Similar arcading surrounds the great hall of the castle at Poitiers, which has at the upper end three vast fireplaces, surmounting a flight of steps, under a flamboyant superstructure.

Poitiers.

All this Angevin work is very delicate and refined, remarkably so considering its early date, and it therefore looks later than it really is.

Among provincial peculiarities may be mentioned the brick towers of the Jacobins and other churches at TOULOUSE, where stone was scarce. They are remarkable for their straight-sided triangular-headed arches, a treatment suggested by the material. LIMOGES has three steeples of an unusual form, and there is a fine tower of a local type at S. LEONARD, between Limoges and Clermont.

Toulouse.

Limoges.

The splendid stone of Champagne tempted architects to feats of masonry otherwise unjustifiable. The church of S. URBAIN at TROYES is a miracle of slender construction, a mere lantern of glass, the traceries cut in slabs of stone slid into chases between

Troyes.

the buttresses, the whole scientifically designed with nothing superfluous.

In Normandy the Gothic style obtained more ready acceptance, though even there it was affected by local taste.

Normandy.

The influence of Burgundy and, through Burgundy, of Lombardy on Norman architecture, which has been already mentioned, had a great effect, and for a time during the eleventh century architecture in Normandy outstripped that of the central school. The consolidation of the regal power under Louis VI. and his successors, and, moreover, the conquest of England, which drained Normandy of men and money, threw architecture back in that province, especially while the sons of the Conqueror were contesting the possession of it. After the conquest of Normandy and its annexation to the French crown by Philip Augustus, architecture revived, and came naturally under the influence of the French school, though the great churches of that date still have Norman peculiarities. Many of these are akin to English work; which is not unnatural, considering the nearness of these countries and their former connexion under the same Crown. For instance, while in France moulding seldom goes beyond a roll on the edge of an order, in Normandy more elaborate mouldings appear of the English type. Again, in Normandy labels, or hood-mouldings, occur over openings inside churches as they do in England, while they are unknown in the rest of France. Also in Normandy you find constantly the round abacus of England, instead of the square one of the French school. The Norman spire, too, is quite different from those of the rest of France, and much more like that of England. Other similarities present themselves in matters of detail, such as corbel corners, and interlacing arcading in walls, a favourite device of the Normans, which they took with them to Italy and Sicily, where we find it at Cefalu, at Palermo and Monreale, and in Campania at Amalfi and Gaieta. In Normandy interlacing arcading occurs at Graville near Havre, and in England it is common enough, abounding at Canterbury, S. Cross, Christchurch in

Resemblances to English work.

COUTANCES CATHEDRAL.

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Hampshire, and at Castle Acre and Castle Rising in Norfolk.

Another special feature in Normandy is the central tower which is a regular feature in the great English churches, but unusual in France. It occurs in both the great abbeys at Caen, and S. Ouen, S. Maclou, and the cathedral at Rouen, at Bayeux, Lisieux, Coutances, Norrey, Bretteville, and many more, and is generally open from below as a lantern with good effect.

Central tower.

The great cathedral of COUTANCES was built in the thirteenth century, with the addition of a lady-chapel, and side chapels to the nave in the fourteenth. The ambulatory has the triple arrangement of arcade, triforium and clerestory, which makes the main arcade unduly lofty in proportion. The arches are deeply moulded.

Coutances.

But the great glory of Coutances is the fine group of towers. The two western towers are square up to the roof, where they change to an octagon, with a spire and enormously tall tabernacles on the corners of the square, and there is a stair turret added at one corner, with tabernacles and a spire of its own, which produces a rich but rather confused effect. The central tower is open as a lantern to the church below. Both nave and transepts have mullioned windows in the façade, which is the Norman fashion, instead of the usual French rose.

The spires.

The Norman type of tower and spire is especially beautiful; those of S. Pierre and S. Sauveur at Caen, and that of Norrey are much alike, and there is a very fine one at Ifs near Caen. The Conqueror's two western towers of the Abbaye aux Hommes are crowned by magnificent thirteenth-century spires, with superb effect. In outline these Norman spires surpass those of the rest of France, which often fail in this particular. That at Senlis, though the details are lovely, fails to satisfy when seen from a distance, whence the outline can be judged; and in a spire outline is everything. In the beauty of their spires England and Normandy are unapproachable.

The Norman spires.

CHAPTER XVII

ENGLAND—THE TRANSITION FROM ROMANESQUE TO GOTHIC

In a former chapter we have traced the Norman style from the rude building of Bishop Walkelyn at Winchester to the refined round-arched work of Priors Ernulf and Conrad at Canterbury, and the airy arcades of 1175 by Bishop Pudsey in the Galilee at Durham. All these buildings have the round arch; and the pointed arch, though it was known, came into general use rather later in England than in France. In France Suger's pointed arches at S. Denis date from 1140, and those at Noyon and Paris from 1150 and 1163. The pointed arch appears, however, at Fountains Abbey in Yorkshire, which was built between 1140 and 1150, and the two western bays that remain of the transitional cathedral of Worcester, which date from about 1175, have pointed arches in the arcade surmounted by a triforium and clerestory in which pointed arches are mixed with round.

The English architect already meditated vaulting the nave of his great churches towards the end of the twelfth century, and made preparation for doing so both at Worcester and S. David's, though at the former it was not done till later, and at S. David's never done at all. It has even been maintained, though I think on insufficient grounds, that the nave vault at Durham dates from 1133.[1]

The nave of Wells Cathedral, except the western part,

[1] *Vide* Mr. Bilson in *Journal R. Inst. of Brit. Architects*, 2nd series, vol. vi. p. 295; also Canon Greenwell in *Durham Cathedral*, p. 36. I take the vault to be twenty-five or thirty years later.

which is later, dates from Bishop de Bohun, 1174–1191, and seems originally not to have been designed for a vault,

Wells.

for it is basilican with an unbroken range of columns and arches, and a continuous arcaded triforium above. The present vault springs from clustered shafts corbelled out high up in the spandrils of the triforium arches. The main piers of the great arcade are enormously massive, and the sculptures of their capitals is remarkable ; I know none like them elsewhere. They have the square abacus, which allows something in the nature or place of the Corinthian volute. The design of the foliage is admirable ; nothing can be better than some of them, with their vigorous sprouting lines and graceful falls of foliage. They are the work of a highly original genius.

The north porch at Wells is an architectural gem, perfect in its way, with the very finest sculptural capitals and spandrils. It has a regular vault of rib and panel work.

The transitional period is well shown in the Temple Church in London, of which the rotunda was consecrated in 1185, where the arches of the main arcade are pointed, resting on clustered shafts of marble, while the triforium above consists of an arcade of interlacing round arches.

In 1174, for the second time English architecture was affected by a foreign influence. Four years after

Canterbury.

the murder of Becket the " glorious choir " of Conrad and Ernulf, which had stood only forty-four years since its dedication, caught fire and was reduced to ruins. Only the outer walls remained, together with Lanfranc's nave. The monk Gervase, who saw the catastrophe, describes how the people were astonished that the Almighty could allow it, and how they tore their hair, and beat the walls with their heads and hands, blaspheming the Lord and the patron saints of the church for not protecting it better.

Architects, both French and English, were consulted,

William of Sens.

and the choice fell on William of the town of Sens, where Becket had resided in exile, and where the cathedral had been finished only six years before the fire, probably from William's design.

"William," says Gervase, "residing many days with the monks and carefully surveying the burnt walls in their upper and lower parts, within and without, did yet for some time conceal what he found necessary to be done, lest the truth should kill them in their present state of pusillanimity. And when he found that the monks began to be somewhat comforted, he ventured to confess that the pillars, rent with the fire, and all that they supported must be destroyed if the monks wished to have a safe and excellent building, . . . thus they consented patiently if not willingly to the destruction of the choir."

New proportion.

French William completely altered the height of the choir in his new work. We do not know quite what the old choir was like, but it was probably proportioned, like such Romanesque churches as, for instance, S. Etienne at Caen, with a large triforium nearly equalling the arcade below, and a total elevation much less than the present. All this was altered—Gervase says the columns of the arcade were lengthened twelve feet, and the whole building was raised in proportion. The relative proportions of S. Etienne at Caen and French William's choir at Canterbury may be compared thus :

S. Etienne.		*Canterbury.*	
Nave arcade .	14 parts.	Nave arcade .	19 parts.
Triforium . .	11 „	Triforium . .	6 „
Clerestory . .	9 „	Clerestory . .	9 „
	34 „		34 „

Greater elevation of new church.

The total height of the building at Canterbury was much greater than that of the Romanesque building. In the new building pointed arches and round are used together, but the pointed predominate. "Exquisitely carved capitals", says Gervase, "replaced the plain old ones ; the circuit of the choir had 28 pillars instead of 22 : there were no marble columns in the old church, but here are innumerable ones ; in the old church the arches and everything else were plain or sculptured with an axe, and not with a chisel,

[*Photo, B. and W. Fisk-Moore.*

CANTERBURY INTERIOR.

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but here almost throughout is appropriate sculpture: there, in the circuit round the choir the vaults were plain, but here they are arch-ribbed, and have keystones; there, was a ceiling of wood, decorated with excellent painting, but here is a vault beautifully constructed of stone and light tufa; there, was a single triforium, but here are two in the choir, and a third in the aisle of the church. All which will be better understood from inspection than by any description." [1]

Conrad's aisle windows were lengthened upwards, but not carried to the full height of the aisle, leaving room above them for a row of windows with trefoil heads, in which is some of the old glass for which Canterbury is famous.

The vaulting is sexpartite as it is in Sens Cathedral, and there are other points of resemblance. But the most remarkable instance is in the coupled shafts of the eastern part, like those at Sens, and these, curiously enough, are not the work of French William but of his successor. In 1178, the fourth year of the work, Master William was on the scaffold preparing for the great vault, when "the beams broke under his feet, and he fell fifty feet, together with stones and great timbers which sorely bruised him". For some time he managed to direct the work from his bed, with the aid of "a certain ingenious and industrious monk who was overseer of the masons, whence much envy and malice arose, because it made this young man appear more skilful than richer and more powerful ones".

The vault.

Fall of French William.

But as he got no better, William of Sens went home to France, and was succeeded by another architect—"William by name, English by nation, small in body, but in workmanship of many kinds acute and honest". By English William the eastern part of the choir with the apse, and all beyond it eastwards was finished. His are the coupled columns, resembling those at Sens, of which French William must have spoken to him, and left particulars.

Work continued by English William.

[1] Cited, *Architectural History of Canterbury Cathedral*, p. 59 (Willis).

The splendid capitals (Fig. 27) of the new choir seem to be by French carvers, left behind by French William; they resemble very closely contemporary sculpture in France, especially that at S. Leu d'Esserent near Creil.

French carvers.

To English taste is owing the much greater use of moulding at Canterbury than at Sens or elsewhere in

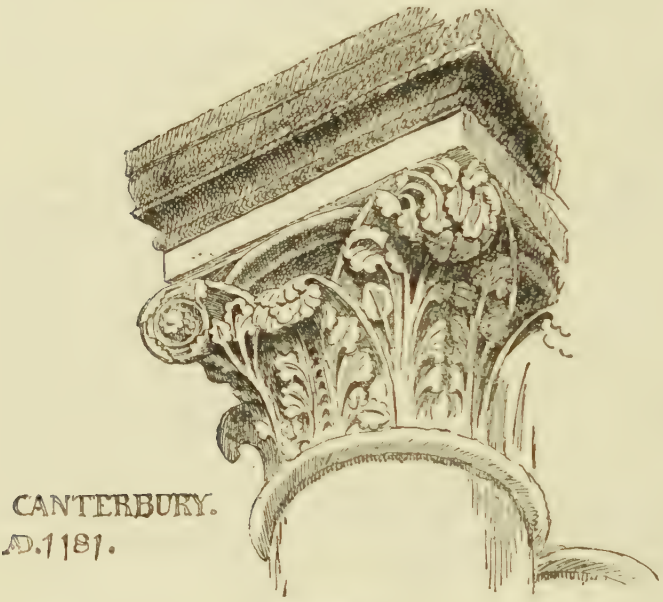

Fig. 27.

France. Another national peculiarity is the great use made of Purbeck or Bethersden marble at Canterbury, as also at Salisbury, Westminster, Exeter, Ely, Lincoln, the Temple and many other buildings. This mode of decoration was not practised in France. In many cases, as at Westminster, the main columns and not only the attached colonnettes are made of solid Purbeck marble. The capitals at Canterbury were copied in style in other

LINCOLN CATHEDRAL.

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buildings: there are some like them in the Castle Hall at Oakham; but they required the square abacus of the French school, and the early adoption of the round abacus in England made that form of capital impossible.

Lincoln.

From Stour in Lincolnshire the Danes drove the Saxon bishop to Dorchester in Oxfordshire, whence after the Norman Conquest the see was moved to the old Roman town of Lindum, or LINCOLN. The new cathedral, of which the doorways remain embedded in the later west front, was begun in 1075. In 1185, Hugh, a Burgundian from Avalon near Grenoble, was created bishop, and in 1192 he began to rebuild his ruinous cathedral. The architect was Geoffrey de Noiers, an Englishman. Bishop Hugh planned and built the choir with a chevet, somewhat on the French plan.[1] This building was injured by the fall of the Norman central tower in 1239.

It has been said that Lincoln Cathedral was inspired by the new cathedral of Canterbury, the renown of which naturally spread far and wide. But the two buildings are not in the least alike, though very probably the lofty proportion of the arcade at Canterbury may have suggested a similar elevation of the arcade at Lincoln. The triforium and clerestory in the two churches are totally different; the simple triforium of French William at Canterbury is represented at Lincoln by a richly shafted arcade of two lights with piercings in the shield, and the clerestory at Lincoln is treated much more architecturally with a triple light and nine arches on clustered colonnettes. At Lincoln we get the round abacus instead of the square one of Canterbury, and this involves a totally different treatment of the capital.

Proportion of arcade.

The English capital and leaf.

The Early English capital is designed with a peculiar trefoil leaf, at first used singly, and afterwards in clusters, twisted and grouped with consummate grace and originality (Fig. 28). For seventy or eighty years this foliage was used throughout the kingdom, from S. David's in the west to Salisbury and Winchester, to Westminster, to Ely and York. Except in a few

[1] The foundations of this have been discovered.

capitals at Bayeux, where English influence was probable, I know of no instance of the use of this leaf out of England. It is a conventional form, not directly copied from nature, though suggested by the foliage of many plants more or less like it.

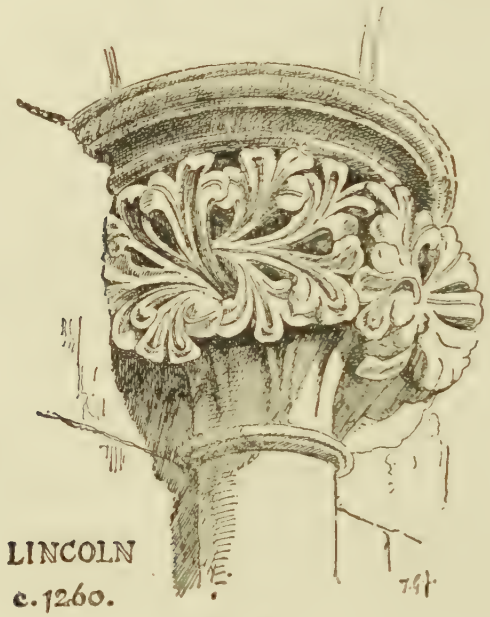


FIG. 28.

The moulded capital.

Another English peculiarity is the moulded capital, a form to which the round abacus and bell lent itself readily. The section of these capitals is drawn with great grace and refinement, which reminds one of Greek profiles.

Early English style developed.

In these and other details we see the English school of Gothic architecture even at this early period taking an independent line, free from foreign influence, and in fact working towards the formation of a distinct national style. Viollet-le-Duc, visiting

Lincoln in 1860 or 1861, says: "I expected from what I had heard in England to find at Lincoln the French style of architecture . . . but after the most careful examination I could not find in any part of the Cathedral . . . any trace of the French school of the twelfth century (the lay school from 1170 to 1220) so plainly characteristic of the cathedrals of Paris, Noyon, Senlis, Chartres, Sens, and even Rouen. . . . The construction is English, the profiles of the mouldings are English, the ornaments are English, the execution of the work belongs to the English school of workmen at the beginning of the thirteenth century." [1]

V.-le-Duc on Lincoln.

It was natural that the art should take this national form, for the bulk of the workmen must have been English, though the work was directed by the Normans, who were the ruling caste. The native English were expert masons; their masonry before the Conquest was as good as that of the Early Norman buildings, if not better, and in some of the decorative arts they were superior. And when we remember how much of the work in the Middle Ages was left to the craftsman, subject only to the general direction of the master-mason, and that the master-mason like the workman was very often himself an Englishman, it is easy to understand how the art gradually and insensibly took a national character, in spite of the undoubted effect of such foreign influence as that of the new building at Canterbury.

English workmen.

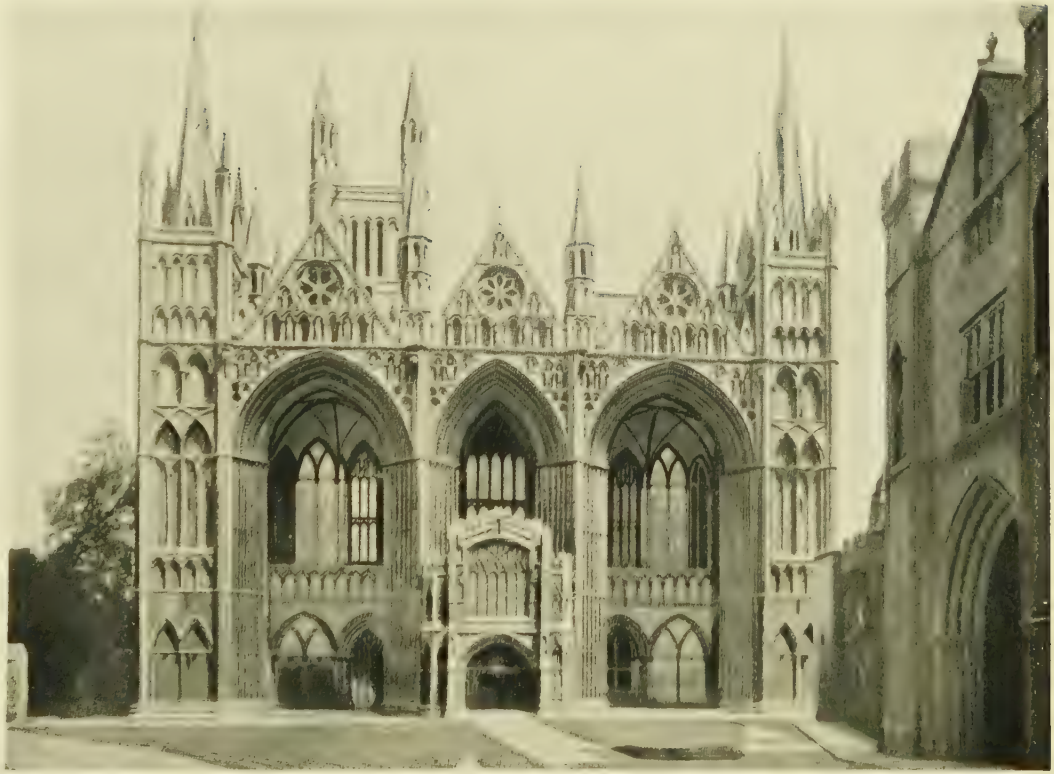
The work of Bishop S. Hugh at Lincoln brings us to the end of the twelfth century, and also to that of the transitional period. English Gothic was now firmly established, and Romanesque tradition was forgotten.

S. Hugh of Lincoln.

S. Hugh of Avalon was especially venerated by the University of Oxford, and one of the statues on the spire of S. Mary's, the University church, represents him caressing the wild swan of which Giraldus tells us the story. S. Hugh had the art of attracting the love of animals. At the Grande Chartreuse he tamed birds and squirrels,

[1] Letter to the *Gentleman's Magazine*, 181, Part I. p. 551, dated Paris, April 15, 1861.

which would come and feed out of his hand. At Witham Friary a robin fed from his table, and brought her brood to show them to him. The wild swan would make friends with no one else, and Giraldus says he had seen it with beak and wing trying to drive away all who came near its master.



[Photo., Cotswold Pub. Co.

PETERBOROUGH CATHEDRAL.

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CHAPTER XVIII

ENGLAND—EARLY ENGLISH STYLE

At the end of the twelfth century the monks of Peterborough were completing the nave of their church in a ponderous style of Norman Romanesque. The Regular orders were conservative, and monastic architecture was always backward; but Peterborough was exceptionally behindhand. Yet no sooner did the old century expire than, in 1200, with an amazing change of mind, the monks began their new west front in a thoroughly developed Early Gothic style. One would imagine that the architect had his plans all matured long before and had been anxiously awaiting the moment when the last stone of the Norman nave would be laid by the Romanesque pedant, and the field would be left open for his new venture, in a better and more enlightened manner of work.

Peterborough architecture Norman.

Sudden change to E. English.

His plan was ambitious. Across the west end of the Norman nave and aisles he built a transept in the Early English Gothic style, on which he proposed to place two towers, of which only one is built.[1] In front of this transept he placed the three great gabled arches of the famous portico over what may be described as an aisle of the transept, projecting it beyond the transept at each end with a staircase tower crowned with a spire. Nothing more daring and nothing more original was ever devised. The lofty triple-arched portico of Peterborough is unique. It has been criticized

The west front.

[1] The ground-plan of these towers forms the end of the Norman nave aisle, as if it had been first intended to finish the west end in the ordinary way with a gable between two towers. The portico is evidently an afterthought.

on several grounds. One writer blames it because it has no relation to the nave and aisles of the church behind it. But how should it? for they are all intercepted by the much wider transept against which the three great arches are placed. Ruskin says the façade would have been almost unrivalled had not the middle arch been narrower than the two side ones. But this leaves out of consideration the two side towers that flank the façade. I prefer to regard the front as a composition of five, not of three parts, of which the three are nearly equal, and are divided by the two wider bays. This seems to make the arrangement natural and reasonable. In the richly shafted jambs of the openings, and the arcaded upper part with the beautiful rose windows in the gables, we have the Early English Gothic style fully developed, and wrought with great magnificence.

Cistercian abbeys.

Nearly contemporary with the Early English work at Peterborough is that of the remarkable group of abbeys in Yorkshire, of which that at RIEVAULX was begun about 1203. They are for the most part Cistercian, and are marked by the stern asceticism of that order. The capitals in the earlier examples are of the fluted cushion type; those later are conventional and moulded. Such carving as was admitted sparingly in some instances was very severe and restrained. The Cistercian rule, as has already been explained,[1] forbade the use of ornament, and there is seldom any sculpture in a church of that order. But they have delicate mouldings to enrich the arches, graceful shafts, capitals of refined profile, arcadings, and in triforium and windows of the later examples beautiful traceries. These churches breathe a certain air of coldness and harshness, unrelieved by any appeal to natural form; but they have a chaste virginal beauty that suffices to give them a subtle charm all their own.

Absence of ornament.

The Cistercian square end.

One characteristic of the Cistercian church is the square east end, which falls in happily with the English preference for that termination rather than the Norman apse. The old Celtic oratory had been square-ended; and the Saxon church was

[1] *Vide supra*, p. 75.

generally square-ended, though in some instances it yielded to the Roman fashion. The parent church at Citeaux also was square-ended. The ambulatories round the choir followed the square plan, and the chapels attached to the east side of the transepts are square instead of being, as usual, apsidal.

The English moulded capital lent itself very conveniently to the Cistercian restriction on ornament, and is almost universally employed.

Southwark. The choir of S. Saviour's Cathedral at SOUTHWARK is a good example of a design on the same ascetic lines as the Cistercian churches. It has no carved ornaments, and trusts simply to the beauty of its proportions and the refinement of the mouldings on its simple architectural features. All the capitals are round and moulded.

Sarum. A cathedral was founded by Bishop Osmund in the hill-fortress of Sarum, which was consecrated in 1092. But the rough soldiery and the peaceful canons did not agree. The site was "barren, dry and solitary", says Peter de Blois; it was exposed to the rage of all the winds, and the church was as a captive, like the ark of God, shut up in the profane house of Baal. "Let us in God's name", he continues, "descend into the level. There are rich champain fields and fertile vallies, abounding in the fruits of the earth, and profusely watered with the living stream."

Salisbury. So in 1220, the year of the foundation of Amiens Cathedral, the Canons of Sarum descended into the plain and, in a meadow called Merifield, founded the great cathedral of SALISBURY. Elias de Derham was entrusted by the bishop with the superintendence of the work, and we have the name of Robert, the master-mason for twenty years, who would have been the architect.

The plan (Fig. 29) is on a very large scale, and as it stood on a clear site, unencumbered with any disturbing buildings, the church is perfectly regular and symmetrical. It shows in perfection what the ideal conception of a great church was in the brain of a thirteenth

century architect, when he had a clear field and nothing to distract him ; for, except for the completion of the spire, the church remains, without any alteration, as it was built by Master Robert.

Salisbury has the two transepts which are characteristic of our great English churches, but are not a feature

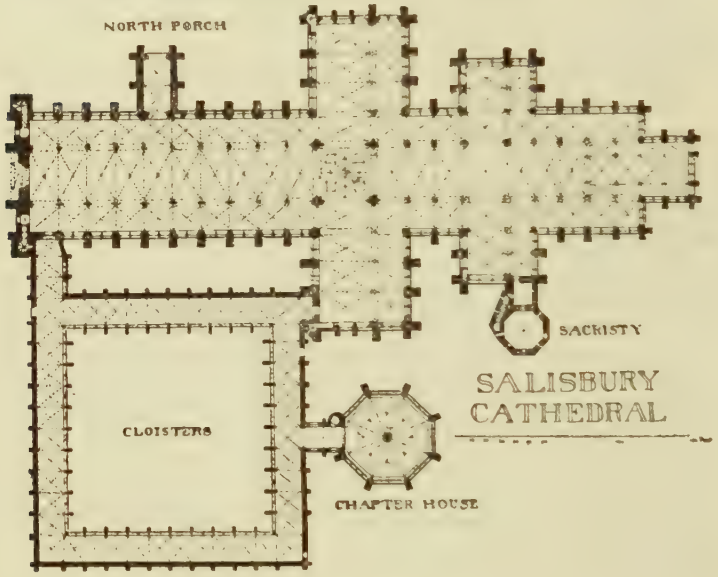
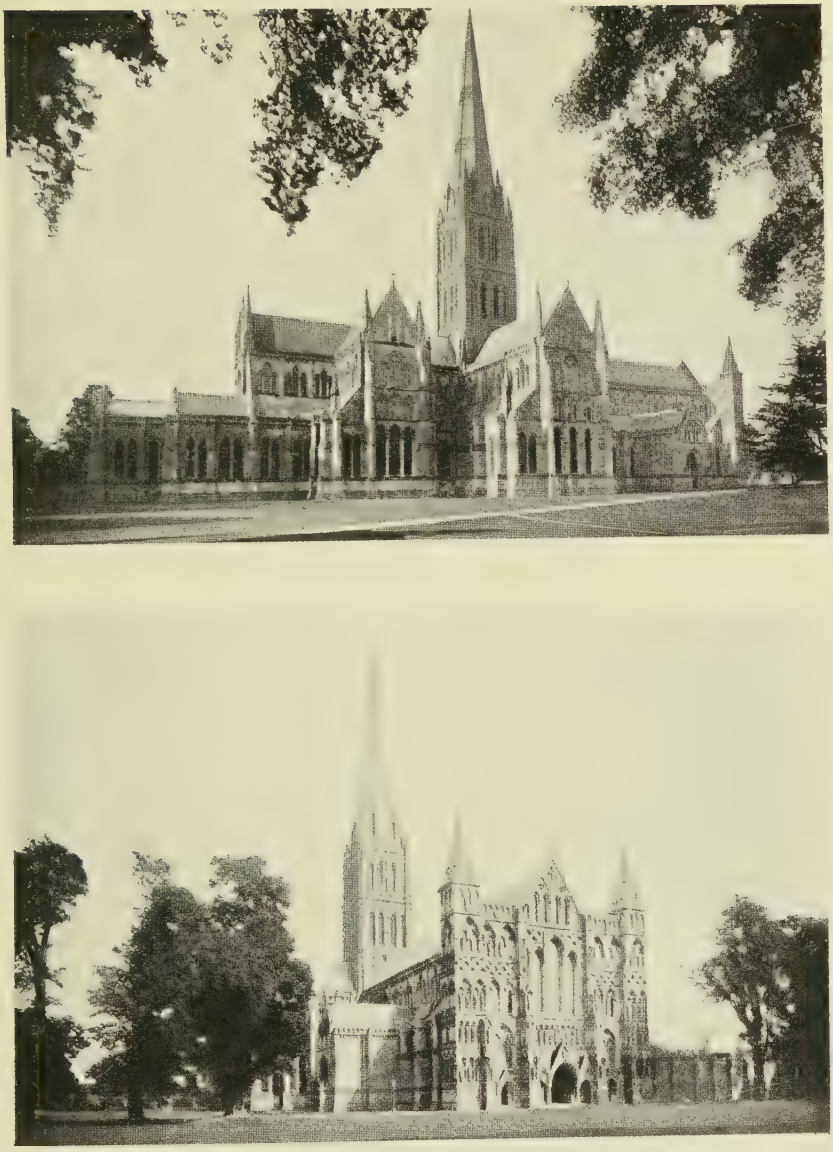


FIG. 29.

abroad. In France there were two transepts at Cluny ; and there is a second transept at S. Quentin, but it is small, and crowded up to the east end. Prof. Willis mentions one at S. Benoit-sur-Loire, which I have not seen. He knows of no other example on the Continent. In England we have two transepts here at Salisbury, and at Canterbury, Hereford, Lincoln, Rochester, Beverley, Worcester, and in a modified form at York, Southwell and Wells. Ely and Peterborough have a second transept at the west end,

The two transepts.



SALISBURY CATHEDRAL.

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and Durham and Fountains at the east. This feature is invited by the greater proportional length of our churches, and in those churches which were divided between the clergy and the laity the second transept made the eastern part into a complete independent transeptal structure.

The arcade at Salisbury is lofty in proportion, and the triforium has four lights with plate-tracery; but it is spoilt by the segmental curve of the including arch. The church is generously lit by wide, simply pointed lights, of which the glare is tempered by beautiful grisaille glass. In the nave the lower lights are grouped in pairs, in the clerestory in triplets.

Plate-tracery.

Great, indeed somewhat excessive, use is made of Purbeck marble. Master Robert had a passion for using it in detached columns, with a daring confidence in their strength and stability. Some detached columns carrying the vault of the eastern chapel are only $5\frac{1}{2}$ inches in diameter. They are very lofty, and are jointed and united by a metal socket.

Purbeck marble.

There is a magnificent north porch, arcaded, with plate-tracery in the heads of the arches.

N. porch.

The west front, which is rather later than the nave, is less satisfactory. It has a high-shouldered effect, and is overdone with arcading.

W. front.

About Salisbury there is a certain cold severity that at first is slightly repellent; it gives something of the feeling I have mentioned as awakened at Amiens, of perfection, and of there being nothing further to be made of a style so completely developed and so consistent in all its parts. Salisbury shows, however, in the north porch and the plate-tracery of the triforium that further progress was to be looked for, and that the architecture would not stagnate in the Early English style.

The building is said to have been finished, and was dedicated by Bishop Bridport in 1258. How the central tower was then left we do not know; the present glorious tower and spire were added in the fourteenth century, about 1331, and have severely tried their supports, for the piers were never designed to carry the weight of

one of the loftiest spires in the world. There is no more beautiful structure than this great steeple; the outline is perfect, the decoration of the tower is sufficient and not excessive, and the disposition of the pinnacles at the base of the spire, on which the contour so largely depends, is masterly. The height of the spire is given by Mr. Price as 400 ft. The spire of Antwerp is 404 ft. high; that of Strasburg, said to be the highest in the world, is 468 ft.

The tower and spire.

In 1204 Bishop de Lucy began at Winchester a building eastwards of the choir in three aisles of nearly equal height. This building is so much lower than the choir as to allow a great window above it in the east end of the choir. The object of this extension was no doubt to afford more room for pilgrims visiting the shrine of the local Saint, S. Swithun. For the same reason the eastwards extension of Canterbury had been made by Priors Ernulf and Conrad. The possession of the relics of a popular saint was a matter of great import to a convent as a source of income; and the cathedral of Canterbury for a long time had no great saint to boast of, for the abbey of S. Augustine claimed as a right the interment of all the archbishops. The murder of S. Thomas à Becket came, therefore, as a blessing in disguise, giving the monks one of the most popular saints in Christendom; the choir was at once more than doubled in size to receive the shrine and accommodate the pilgrims who flocked to worship at it. In the same way in the thirteenth century Lincoln Cathedral was extended eastwards by the angel choir to receive the shrine of S. Hugh and afford space for pilgrims.

Winchester: De Lucy's building.

Bishop de Lucy's building at Winchester is in a very refined style of Early English work. It is lit by wide, pointed lancet windows, coupled in pairs, with shafts and arches inside and a beautiful wall arcade. The vaulting of the three aisles being all nearly on one level gives a favourable opportunity of studying the construction of the English vault, which differs in some respects from the French. Both have the same construction of ribs, so far as concerns

The vaulting. Difference of French and English vaulting.

the transverse and diagonal nervature, but they differ in the method of filling in the panels, and this also affects in some cases the ribbing (Fig. 30).

The French way.

In French vaulting the ashlar beds of the filling in of the panel are laid parallel to the ridge lines ; those in the longitudinal vault being parallel to the axis of the building, those of the transverse vault being parallel to the transverse arch, and at right angles to the side wall. The two thus meet at a right angle on the diagonal rib.

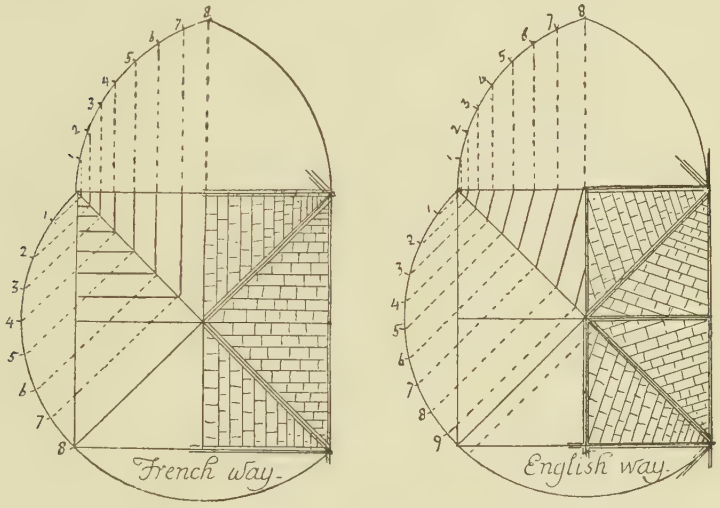

FIG. 30.

The English way.

In English vaulting the ashlar beds of the panel are laid squarely across a line dissecting the panel. Consequently in the English vault the panels will meet at the crown on a serrated line, in the French vault on a straight line. This serrated junction of the ashlaring in the English vault sometimes caused the introduction of a rib at the ridge ; or instead of a ridge rib, a straight course, serrated to receive the ends of the ashlars as they abut.

The English system seems to load all the ribs more equally; the French system to throw the greater part of the load on the diagonal. Indeed in the French system one can imagine the transverse arch left out and the longitudinal vault running like a waggon vault continuously. By the English plan, on the contrary, the transverse rib is as important as the diagonal, and takes its share of the load.

This explanation will account for the frequency of the ridge rib in English vaulting and its absence in France.

Increase of ribs in English vault.

But English architects had a fancy for multiplying the ribs of their vaults. In the nave at Lincoln (1209–35) there is an extra rib introduced between the direct and the diagonal ribs. In the vault of S. Hugh's choir, which had to be reconstructed after the fall of the tower in 1239, the ribs are arranged in a strange way, forming a lozenge-shaped compartment lying diagonally across the bay,—a fantastic conception of the mason. As time went on, ribs were multiplied till we have the elaborate lierne vaults of Winchester, and finally in the fifteenth century, at Henry VII.'s Chapel in Westminster, ribs and panels were blended, and the vault became a complete solid shell on which the ribs were traced in relief and were merely ornamental, not constructional features, but simply a kind of panelling cut on the surface of the vault.

In French vaulting, though there are instances of additional ribs being introduced, the construction seldom goes beyond the transverse and diagonal rib, even in the later work of the Flamboyant period.

Lincoln nave.

The nave of Lincoln Cathedral was begun by Bishop Hugh of Wells (1209–35) and was finished in the time of his great successor, Bishop Grostête. The outside of this part and of the transept adjoining are vigorous designs in Early English, with acutely pointed arches. The nave has wide arches, well moulded, resting on clustered columns. The triforium has two three-light openings in each bay, with shafted arches and plate-tracery in the head, of quatrefoils simply pierced through the shield. The vaulting shaft is corbelled out in the

WELLS CATHEDRAL.

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spandril of the arcade. It was in the time of Bishop Grostête that the central tower fell, as has already been mentioned, and by him it was rebuilt up to the top of the second storey above the roof in the Early English style, but with some enrichment. The magnificent upper part, which makes this one of the most beautiful of all towers, was added between 1307 and 1311. The eastern extension of the choir, known as the "angel choir", was added between 1255 and 1280. We shall return to this later.

Wells west front.

The west front of the cathedral of WELLS was built by Bishop Joscelin (1206–1242) in a very different style from that of the nave, which has been already described. The front is in the Early English style, now thoroughly developed at Salisbury and elsewhere. Like Salisbury, it is richly arcaded, and the niches were filled with statuary to an extent infrequent in England. Many of the statues have disappeared, but a vast number of them fortunately remain, and all across the façade at the top of Bishop Joscelin's arcaded building, under an arcading of Early English work, runs a series of figures arising for the Last Judgment from their graves. No other church in England is so rich in imagery.

The statues.

The design of this front is very original. It is expanded sideways by placing the two western towers beyond the width of nave and aisles; and Joscelin's work formed, in fact, a splendid screen of niches and imagery finishing on a level line below the present towers. There is not even a central gable to end the nave, and the later superstructure finishes square with tiers of niches and arcades. The two towers carry up the buttressing of the lower part and are excellently designed. They were added in the fourteenth century.

This façade is the finest feature in the group of buildings at Wells, which, with the cathedral, the Bishop's palace with its moat and gatehouse, the charming vicar's close with its bridge to the cathedral, and the chapter-house, is almost unrivalled for historic interest and beauty.

In the façades both of Wells and Salisbury one cannot but wonder at the smallness and insignificance of the doorways. When comparing English and French cathedrals, and especially their west fronts, one is struck at once by the different importance given to the portals. In France the western portal is perhaps the most important feature in the exterior design. In England it is made of little account, and plays no part in the architectural character of the façade. At Wells and Salisbury the west door is scarcely noticeable in the elevation. At York and Lincoln it is the same. At Durham there was originally a western doorway, but it is now covered by the Galilee. The main entrance of most of our great churches is at the side, and is preceded by a fine porch, as at Wells, Salisbury, Christchurch, Worcester, Gloucester, Canterbury, Beverley, Durham and Malmesbury. The most beautiful doorway at Lincoln is at the side of the angel choir, and at Westminster in the north transept. The same preference for a side entrance is shown in our smaller churches in towns and villages. Most of the fine Norman doorways in our village churches are at the side. If there is a west door, it is seldom used; often there is none. One might imagine that climate had something to do with this preference for a side entrance, especially on the south side; but the entrance is as often on the north, as it is at Wells, for instance. One reason may be the greater facility for building a porch, as a shelter from the weather, on the side of the building rather than on the west front, where such a projection might often be inconvenient. There are indeed western porches at Ely and at S. Albans to protect the doorways there, but they are exceptional.

The west doors in England and France.

Main entrance at side in England.

This chapter on Early English work may be closed with the presbytery at Ely, which was built between 1235 and 1251 in a style superior to that of Salisbury, and which cannot be praised too highly; or still more properly with the splendid chapel of the nine altars—the eastern transept—at DURHAM, where the style perhaps achieves its greatest triumph.

Ely.

Durham.

DURHAM—CHAPEL OF NINE ALTARS.

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It was begun in 1243, and as it was not finished till 1280 it may be considered the last, as it is the grandest, building in the Early English style, before it began to pass into geometrical Gothic.

The name of the architect, *Ricardus de Farinham, architector novae fabricae Dunelm*, has been preserved. Nicholas de Farnham was then Bishop, and the architect may have been his brother, as Canon Greenwell suggests. Nothing can be finer than the simple wide lancet windows and the lofty clerestory of lancets above, that tower up between the clusters of marble shafts which carry the vault. The severity of these windows and their square-cut jambs through the wall give an air of tremendous strength though the construction is light rather than ponderous.

The architect.

In this splendid chapel, as also at Lincoln, and Ripon and the northern buildings generally, one finds a severity and austere sharpness that contrasts with the softer graces of Ely, Peterborough and Wells. Even Salisbury breathes a gentler air, with her wider lancets and less acute arches.

Severity of northern Gothic.

CHAPTER XIX

WINDOW TRACERY

THE traceried window, which is one of the glories of Gothic architecture, and of that art alone, was not, as might be imagined, a pure invention, freshly imagined in the brain of some cunning artificer. On the contrary, it was the outcome of a series of experiments, at first promising no such result as was slowly and logically developed out of them. Windows at first were separate openings distributed about a wall as opportunity offered. In the Norman gabled nave or transept they would be arranged in some sort of order, and with a certain regard to architectural effect, as they are at the end of S. Cross at Winchester, or in the Cathedral transepts there, and at Peterborough and elsewhere. These gradually would be drawn together, grouped, it may be, in pairs. Being splayed inwards, a pair would approach one another on the inside of the building (Fig. 31 A), while outside they remained remote, and the idea might occur of uniting the pair inside and bringing them together outside by omitting the inner part of the heavy pier between the windows (Fig. 31 B) and substituting an arch inside to include both lights. This in fact reduces the pier between the windows to a mullion. The next thing would be to put an including arch on the outside also, which would leave a shield of blank masonry in the head of the arch, and this being only a thin plate of stone could be pierced with circles, trefoils or quatrefoils or other geometrical figures, as in the triforium of S. Hugh's choir at Lincoln, or in that of the nave at the same church, for the

Tracery slowly developed.

Grouping of single lights.

triforium followed the same course of development as the window.

These piercings grew in number and size, leaving less and less of the blank shield. The clerestory at Chartres is a fine example of this "plate-tracery," as it is called, where the two clerestory lights are surmounted by a great circle which is cusped, and surrounded by piercings of large and smaller quatrefoils. Here very little of the plain shield remains. The tendency would be to get rid of it altogether. In the tracery of the porch at Salisbury this is almost achieved,

Plate-tracery.

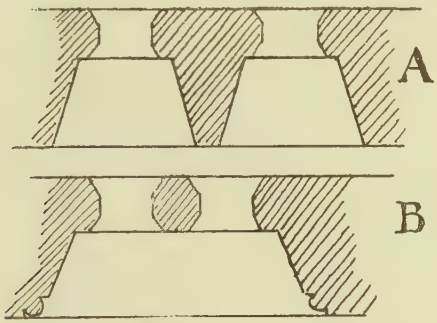


Fig. 31.

for the piercings are surrounded by mouldings of their own, and this throws the blank remainder of the shield into the shade. In the triforium of S. Malo (Fig. 32) these remains are partly removed by cutting them out square through the stone, but the removal is not complete, nor is the method perfect, with the piercing cut squarely through. The true secret had yet to be discovered.

It was this. It occurred to the mason that as the stone was moulded on the side next the pierced figure, whether circle or quatrefoil or what not, the square-cut opening on the back, as in the example from S. Malo, wanted finish. Consequently he moulded that side also, following the curve of the inside concentrically with it, and at a distance equal to the width of the moulding doubled, for the same

Invention of bar-tracery.

moulding would be worked on the back of the stone as on the front. This would equal the width of the mullion, or the impost of the tracing on the cap at the springing, if the mullion were interrupted. This is shown in a simple form by the window from Etton church in Northamptonshire, where it will be seen that the stone round the piercings on the back of the tracery is moulded in the same way as it is

Fig. 32.—S. Malo.

in the lights. The mullion in fact runs up and forms a tracery-bar.

This is the history of the invention of bar-tracery, which Ruskin deplores as the beginning of the decline of Gothic architecture. "Hitherto", he says, "the architect had thought only of the penetrations, not of the stone between them. But now his eye, which had till then been watching only the star-like openings, was suddenly caught by the tracery. It literally had not been seen before. It flashed out in an instant as an independent form. It became a feature of

Ruskin on bar-tracery.

the work. The architect took it under his care, thought it over and arranged, and distributed it as we see."

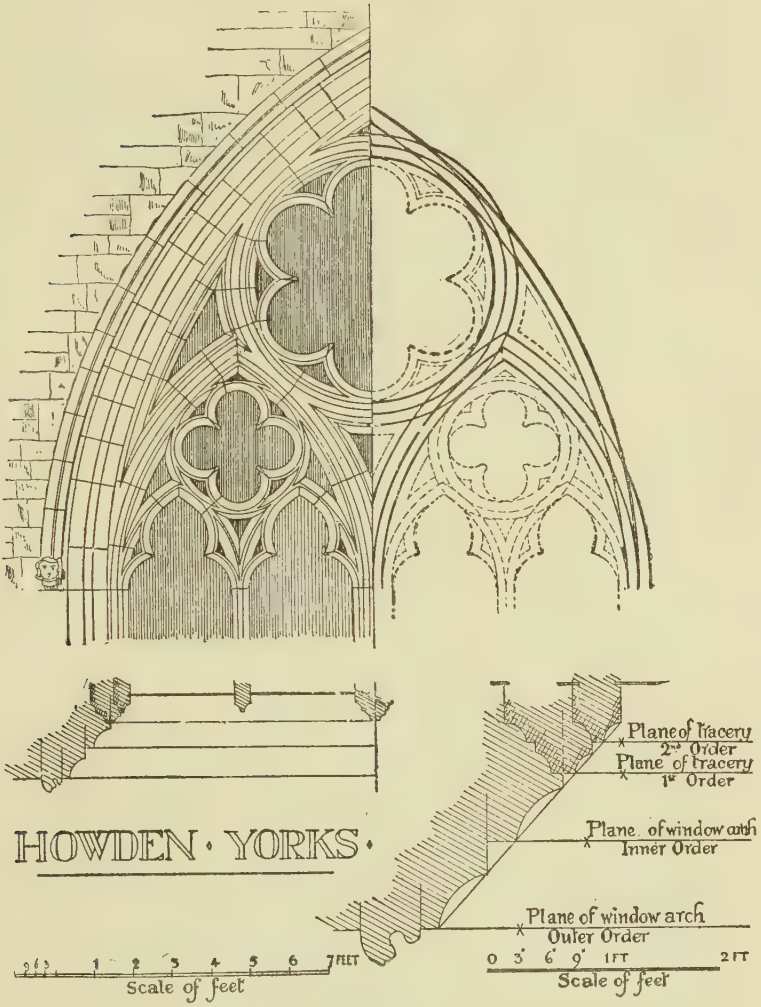

HOWDEN · YORKS ·
Plane of tracery 2nd Order
Plane of tracery 1st Order
Plane of window arch Inner Order
Plane of window arch Outer Order
0 1 2 3 4 5 6 7FEET
Scale of feet
0 3' 6' 9' 1FT 2FT
Scale of feet

FIG. 33.

He goes on to inveigh against the reduction of the tracery to the slenderness of a web, and of the twisting of the forms into shapes inconsistent with sound construction.

But this is only to blame the art in its abuse. It was impossible for the art to have stood still in the plate-tracery stage. That was obviously only a transitionary phase, and having gone so far it was inevitable that the style should progress on the road it had hitherto followed,

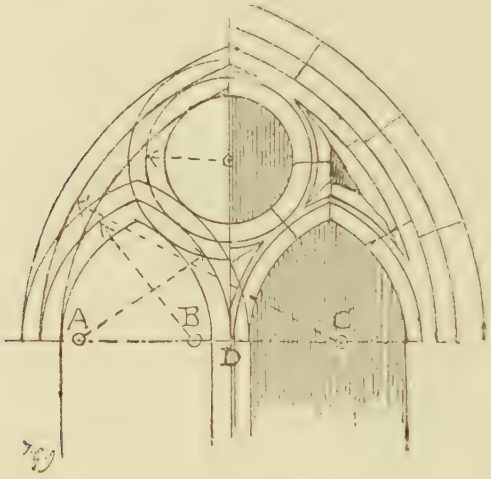


Fig. 34.

and should reach the full development of the theory of pierced work. A simple diagram will make clear the principle on which all Gothic windows are set out on the system of bar-tracery. Fig. 34 shows a window of two lights with a circle in the head. From centre A with radius to D, the centre of the mullion, a curve is drawn, which will be the central line of the bar forming the head of the light. A similar curve is drawn from B. From the same centres curves are drawn from the edges of the mullion. These three are the central and sight lines of the tracery bar.

Theory of bar-tracery.

Then the centre and sight lines of the circle are drawn which must be tangential to those of the window-head. The window arch again has its own central and sight lines drawn from centre C, which must be tangential to the central and sight lines of light and circle. Having these lines it is easy to set out the fillet of the mullion on the central lines and to draw the window as on the right-hand half of the diagram. As the central lines of the tracery-bar in circle light and arch meet tangentially it is obvious that the fillet at the tangential points will coalesce and come to the same width as on the mullion, and that the tracery bar at those points will come to the same width as the mullion. The mullion, in fact, is the module on which the tracery is based. On the general principle shown in this diagram all traceries have to be set out for the mason.

Sub-orders in tracery.

In the larger windows the system of subordination of orders is applied to window tracery. In other words, the traceries are in two or more planes, retired behind one another, each of them so complete in itself that it would by itself make a perfect window. The inner order is slighter than the outer, into which it dies, and in which it is, as it were, contained in embryo. The diagram of a window at Howden in Yorkshire will explain this. Both orders spring from, and are contained in, the central mullion, but the numbers shown by strong lines in the right-hand half of the diagram cease with the first order of tracery, and the second order without them is shown by the thin lines only. The large mullion contains both orders, the smaller mullion contains and supports only the second or sub-order. Besides the tracery the window arch has two orders of its own.

Salisbury cloisters.

The windows of the cloisters at SALISBURY afford an excellent early example of bar-tracery completely developed. They date from the latter part of the thirteenth century. Here the tracery is in two orders or planes, and the whole window is enclosed in an outer order.

It will be observed that while the tracery in the head is cusped the heads of the lights are not cusped. This

distinction continued for some time after the introduction of bar-tracery, and preserves the tradition of plate-tracery, when the shield of the window-head was pierced with figures, which led up to the development of tracery, while the lights below were plain lancet-headed openings.

Origin of bar-tracery.

It has been disputed whether bar-tracery originated in England or in France. It is found in the apse windows at Reims (Fig. 25, *supra*, p. 119), which Viollet-le-Duc says were built about 1215, though it is hard to believe that the building which was founded in 1212 should have risen so high in three years. The east end of Netley was built in 1240, and contains a well-developed bar-tracery window, but it is said to show traces of being a later insertion. Windows with perfect bar-tracery occur at Notre Dame, Paris, dating from 1235 to 1240, and at Amiens, of which the nave was occupied in 1235. Though there is little difference in date, it would seem that the examples of bar-tracery in France are earlier than any with us. Those at Westminster in Henry III.'s apsidal chapels, which were begun in 1245, would probably date from 1250 or maybe a little earlier.

CHAPTER XX

ENGLISH GEOMETRICAL DECORATED

Westminster Abbey is the last Early English building and the first building in the Decorated style in this country.

Westminster Abbey.

The heavy sombre building of Edward the Confessor, which had in its day been the wonder of English architecture, and as William of Malmesbury says had revolutionized church building in this country, had long become out of date in the thirteenth century. English William had already completed the splendid cathedral of Canterbury, Ely was finished with a new east end and presbytery, Durham with the chapel of the nine altars, Lincoln had its new nave completed and Wells its west front. The royal abbey, where English kings were crowned and buried, and where the sainted king of Saxon days lay enshrined, could not remain in its rude semi-barbarous state, and in 1245 Henry III. began to rebuild its eastern part. Henry, whom Dante describes as "the king of simple life", was a great patron of art, the virtuoso of his day, with a passion not only for architecture, but for all the subsidiary arts of sculpture, painting, jewelry and fine woven and embroidered stuffs, and not least of all for relics of which he was an indefatigable collector.

Edward Confessor's church.

Henry III.

The superintendence of the work was entrusted to Odo the goldsmith and Edward his son, and the master-mason and architect was Master Henry of Westminster. He was succeeded in 1253 by Master John of Gloucester, who was followed

The architects.

by Master Robert of Beverley from 1262 to 1280.[1] But the original design of what I venture to call the most beautiful of all Gothic churches was that of Master Henry, which was respected and adopted by all his successors. Even in the late fourteenth and fifteenth centuries, when the nave was built, the original design of Master Henry was followed, rather than the later form of Gothic then prevailing. These masters all held the office of king's masons, the work being done by the king and not by the monks, for the church was always regarded as a royal foundation, over which the Crown had privileged rights, which are still exercised at a coronation.

The king's masons.

The king's masons and the architects generally of that date were all laymen. We hear of their wives and daughters; they owned house property, and were citizens, serving on juries and inquisitions. They had robes given them of esquire's degree, and William Drawsword, one of a famous family of "imagers" of York, was Sheriff, Member of Parliament and Lord Mayor of his native city. Richard of Gainsborough, architect of Lincoln Cathedral in 1300, was buried under a gravestone engraved with a triple canopy like those of the Canons. Indeed from various incidental notices that have come down to us, it would seem that the social position of the master-mason in the late thirteenth and following centuries was little, if at all, inferior to that of the modern architect.

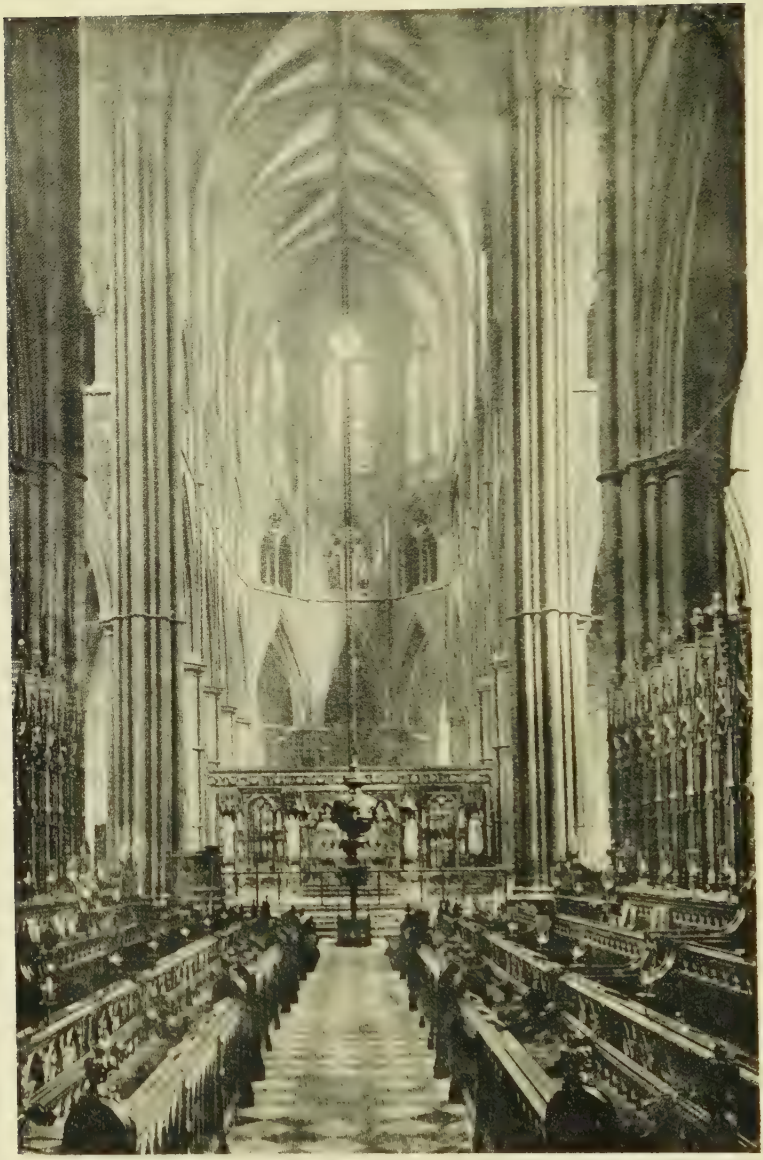
The lay architect.

His social position.

Henry III. had French tastes, and he was excited by what he heard of the great church building going on in France. The cathedral of Reims was just finished, together with the choir of Le Mans and the nave of Amiens, and Pierre de Montereau was engaged on the church of S. Denis and the Sainte Chapelle at Paris. Master Henry was probably sent abroad and, like Wilars de Honecort, filled a sketch-book with notes and drawings of the buildings he saw either in progress or just finished. As Sir Gilbert Scott says,

Henry III.: French sympathies.

[1] Lethaby, *Westminster Abbey and Craftsmen.*



WESTMINSTER ABBEY.

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"Would that we had his note-book".[1] And so for the last time, till the Renaissance, a foreign influence was brought to bear on English architecture.

At Lincoln S. Hugh had built an apse, but his example was not followed, and elsewhere the English square east

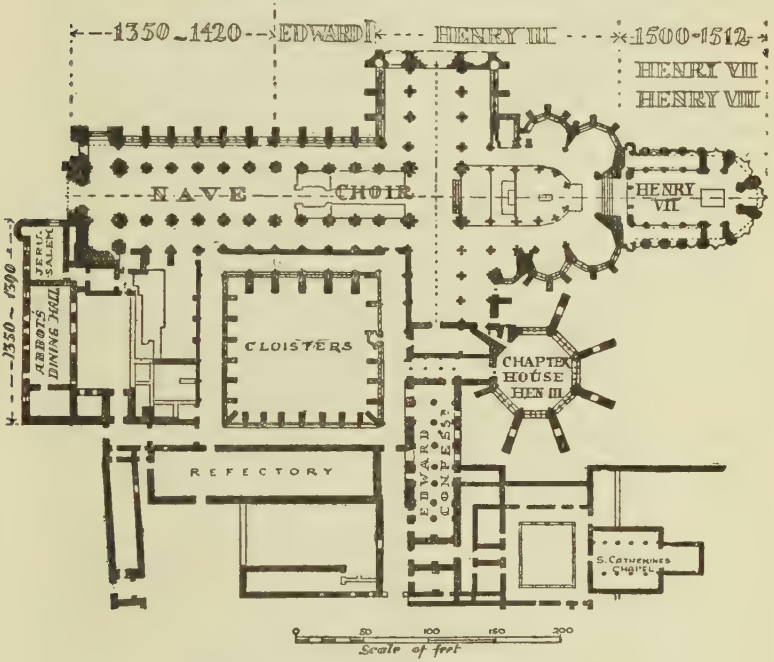

Fig. 35.—Plan of Westminster Abbey.

end prevailed. But Westminster was not only apsidal; it had the regular French chevet, with ambulatory and radiating apsidal chapels, the only instance of such a plan in this country. Here, however, the foreign resemblance ceased. The Purbeck columns with detached colonnettes, the round moulded capitals,

The apse.

[1] G. G. Scott, *Gleanings from Westminster Abbey*, p. 20.

the vaulting with its banded colours filled in English fashion, the carving of the wall arcading, the acute arches of both apse and main arcade, all are purely English in style and execution. The ideas taken from France are translated into English.

English detail.

In the windows bar-tracery appears, probably for the first time in England. In this French example may have had an influence. The windows have two plain lancet-headed lights carrying a circle which is cusped with sexfoils, and in upper storeys with cinqfoils. The sexfoils are like those in the apsidal chapels at Reims (Fig. 25, *sup.*). They are perfectly well designed and finished, and when the masons got to work on the great rose windows of the transepts they showed they had nothing to learn from abroad in the way of tracery.

Bar-tracery.

The proportion of the arcade to the total height is one-half, the same as at Amiens: that of the triforium is rather greater than at Amiens, and its design incomparably more beautiful. Nothing can be finer (Fig. 36) in this class of work; the tracery is double, repeated on the inside of the wall, and the whole is richly shafted with Purbeck, and moulded. Nowhere else is there a triforium that can be compared to this. Contrasted with a bay of Westminster a bay of Amiens seems poor and thin, the triforium bald and shadowless, the mouldings slight and ineffective. In nothing does the superiority of Westminster appear more than in the apse, where instead of the crowded columns with the ungracefully stilted and obtuse arches of Amiens you have columns, well spaced apart, agreeing in interval with those of the choir, and with acutely pointed arches springing from the capitals, the whole forming a harmonious composition, encircling the sanctuary. The difference is that the apse at Westminster has only five cants or sides well spaced, while that at Amiens is crowded with seven.

The proportion.

The triforium.

Contrast with Amiens.

Apse compared with Amiens.

Master Henry seems to have built the choir and

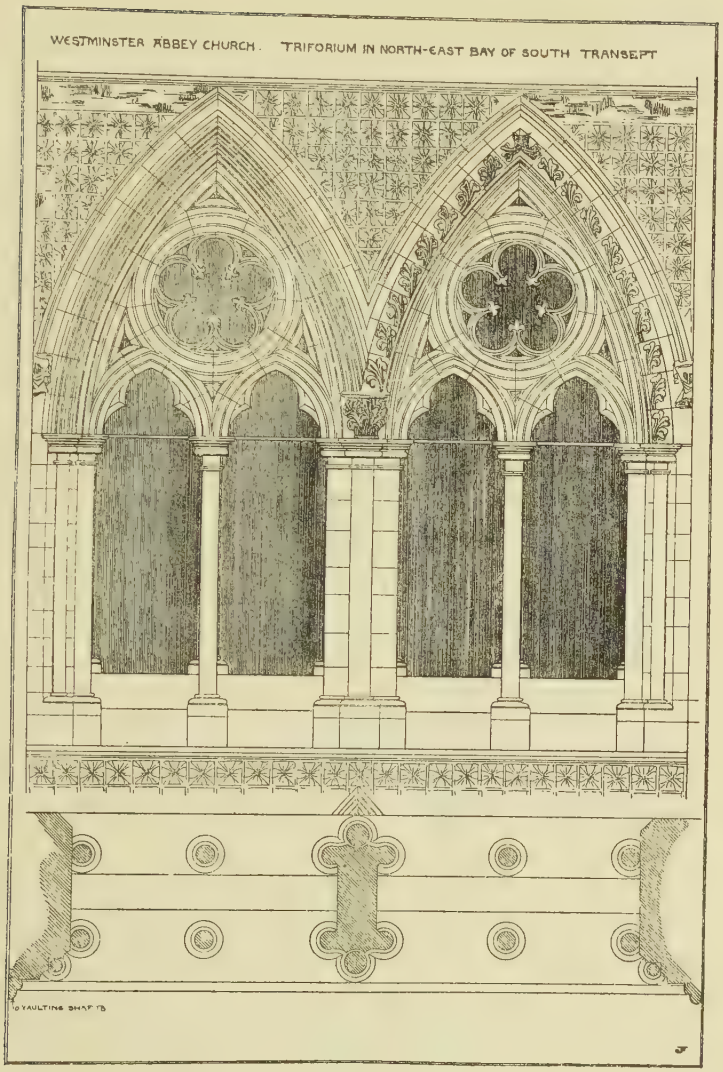
WESTMINSTER ABBEY CHURCH. TRIFORIUM IN NORTH-EAST BAY OF SOUTH TRANSEPT
VAULTING SHAFTS

Fig. 36.

transepts, of which the northern has the only instance in England of a great portal like those of French churches, and also the first bay of the nave. This bay was finished by Edward I., who also built the next four bays of the nave. The rest of the nave was built in the Perpendicular period between 1350 and 1420, but on the model of Master Henry's design, a rare instance of mediaeval respect for a previous style. It is only in the mouldings of the capitals and similar details that the Perpendicular mason betrays himself.

Master Henry's work.

Work of Edward I. The nave.

The chapter-house of Westminster was begun in 1250, and in it we find Geometrical Decorated tracery, which had been somewhat tentatively used in the choir five years before, fully developed, and used with full assurance. In its present state it is a more or less modern building. For after being used for the meetings of the House of Commons, till that body moved to S. Stephen's chapel in 1548, it was turned into the Record Office, the windows were blocked or destroyed, the vault was removed and a gallery and flat ceiling were substituted. The whole was fitted up with cases and pens for documents. Only the beautiful central column of Purbeck marble was spared. From this sad condition it was rescued and restored by Sir Gilbert Scott, who may almost be said to have discovered it. It is an octagon, with windows on six sides, blank tracery on a seventh, from which the design of the missing windows was recovered, and a shortened window on the eighth over a fine doorway.

Chapter-houses, Westminster.

The round or polygonal chapter-house is an English feature. Worcester has a round chapter-house of Norman date; Margam had one round within, polygonal without; Abbey Dore had one decagonal both within and without; Lincoln has a decagonal one, built by Bishop Hugh of Wells before 1235. The Regular orders seem generally to have preferred the rectangular plan, as at Rochester, Winchester, Canterbury, Chester, Gloucester, Norwich, Durham and the Cistercian abbeys. But Thornton

Polygonal chapter-house an English peculiarity.

LINCOLN CATHEDRAL—THE ANGEL CHOIR.

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Abbey has an octagon ; and the polygonal form found favour with the secular canons at Hereford, Lincoln, Lichfield, Salisbury, Southwell, Wells, York and Manchester. At York the ceiling is of wood ; in all the other polygonal chapter-houses, except that at Southwell, there is a central column from which the stone vault radiates as a conoid to a ridge half-way to the wall, octagonal or decagonal as the case may be. The chapter-houses of Westminster, Salisbury, Lincoln and York are, I believe, all of about the same size, the interior plan being inscribed within a circle of 60 ft. in diameter. In France there are no such chapter-houses. In Italy the plan is used only for baptisteries. With us they form a beautiful feature in the group of cathedral buildings, and justify the inscription on the doorway of that at York :

No polygonal chapter-houses abroad.

> Ut rosa flos florum
> Sic est domus ista domorum.

The choir and presbytery of Lincoln were finally enlarged between 1255 and 1280 by the erection of what is known as the "Angel Choir" from the sculpture of angels in the spandrils of the triforium. The purpose of this enlargement was to gain space for the shrine of S. Hugh and for the influx of pilgrims who came to worship there. The apse and chapels of S. Hugh were pulled down, and the choir was extended by five bays eastward and finished with a square end. In this work the Geometrical Decorated style is fully developed. The tracery-bar ramifies correctly and the mouldings coalesce perfectly. The design is magnificent, but it has not the grace of Westminster. The arches and the bays are much wider in proportion, and the triforium, though beautiful, will not compare with that of Master Henry. In the spandrils of the triforium are the angels which give this choir its name. They are excellently sculptured and full of character, but they are rather small for their position and too high to be well seen. At Westminster there are some angels

Lincoln.

The "Angel Choir".

similarly placed in the transepts. Those at Lincoln are variously employed. One expels Adam and Eve from Paradise; another holds a little soul in a napkin; a third we find with surprise equipped with falconer's gloves and holding a hawk on his wrist.

Lincoln: east end.

At the east end is a glorious traceried window of eight lights, which like others, its fellows in England, may challenge and not fear comparison with the foreign apse (Fig. 37).

Low proportions.

But Lincoln has one great fault. The interior is too low; the effect is depressing, and it is felt the more because of the enormous length of the building, which demands a much greater elevation. Outside this is not felt, and the effect of this great pile with its three towers on the summit of its precipitous hill is magnificent and almost unrivalled.

The south door.

On the south side of the "Angel Choir" is a fine recessed doorway, treated somewhat in the manner of the great French portals, with statuary in the jambs, the head and round the arch. The latter are all carved in relief in the solid of the arch, and not placed in niches in the French fashion, within which in later examples the figures as they come overhead are sometimes hung up with hooks, being quite detached. The sculpture is very fine, and there is nothing at Chartres or Amiens superior to the figures of the Church and the Synagogue in this Lincoln doorway. Unhappily they are headless.

Sculpture.

I have already spoken of the fine statuary at Wells, where, though many niches have been robbed of their figures, it is said that out of 300 statues there still remain 130.

Naturalism in sculpture.

In the sculpture of capitals and decorative work the designs tended to greater naturalism. The Early English leaf, after being twisted and refined in many ways, gave way to more direct imitation of nature towards the end of the century. The carving in the chapter-houses of Wells and Southwark is exquisitely natural. That of the wild geranium at the latter place is like Nature herself.

The Geometrical Decorated style may be studied as

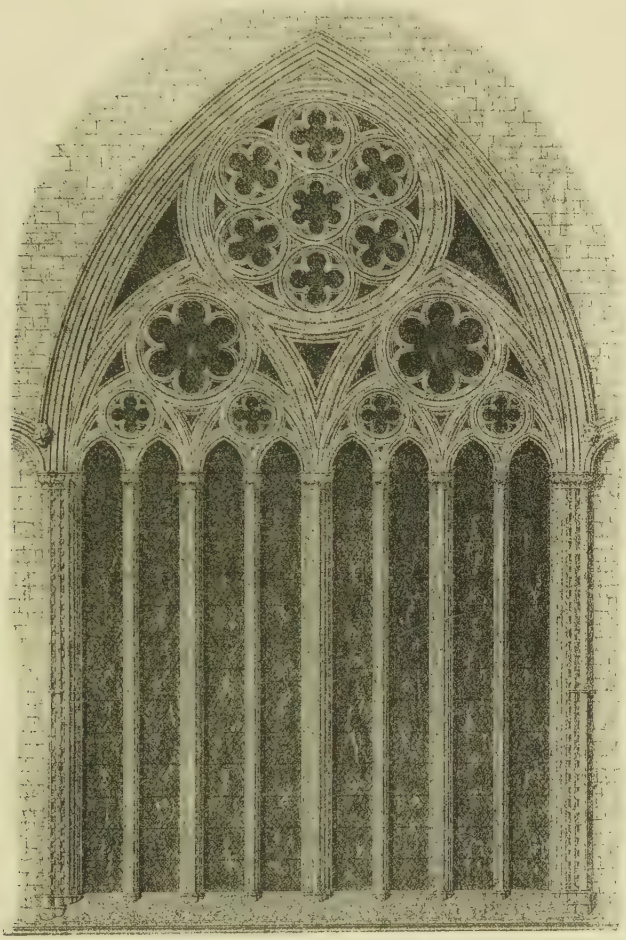


Fig. 37.—Lincoln: East Window.

well at Exeter Cathedral as anywhere. The plan of that cathedral is unusual. Like Bourges, it has no

transepts, but where they would have been are two Norman towers, the only remains of the church built by Bishop Warelwast between 1107 and 1136. The eastern part of the cathedral was rebuilt in the Decorated style between 1270 and 1307, and the nave between 1327 and 1335 in the same style as the rest. Like the nave at Westminster this is a rare instance of a previous style being respected and followed in a later age, when a new style was already beginning to be developed. The anachronism, however, is not so great here as at Westminster.

Exeter Cathedral.

The result is a singularly harmonious interior. The vault runs with scarcely a break from west to east of the church, and the details of the bays being the same from end to end of the building give it a unity and consistency equal to that of Salisbury. But the difference between the two is like that between poetry and prose. For the harshness and coldness of Salisbury you have at Exeter a seductive warmth and graciousness that can be felt but is difficult to explain. Though long and rather low, there is no effect of depression nor of monotony, though it is symmetrical. The pillars are shafted richly with marble, the vaults have a fan-like spread, the whole has a mellow tone of colour and softness of outline, and not the least charm of this lovely interior is the screen that divides the choir from the nave, and the beautiful organ case upon it.

Its harmony.

Beauty of the interior.

The vaulting is especially rich. I have above alluded to the multiplication of ribs in English vaulting; and at Exeter they are so many that they form a conoid springing from each vaulting shaft, with a beautiful perspective effect as you look along the length of the nave and choir.

The vaulting.

One of the most beautiful buildings in the early Decorated style in England must have been the abbey of S. Mary at York, which is now a ruin. It was begun in 1270 and finished before the end of the century. It has something of the severity of the northern school, but the windows and the details

S. Mary's Abbey, York.

EXETER CATHEDRAL.

To face page 168.

generally are of the greatest delicacy and refinement. It is well worth careful study.

Edwardian Gothic.

The Geometrical Gothic of the end of the thirteenth century — Edwardian Gothic — is especially refined and graceful. To Edward I. we owe not only the continuation of his father's work at Westminster Abbey, but its enrichment with specimens of Italian Gothic art. Italian work had already appeared in the abbey. Abbot Ware brought back from Italy materials for the splendid pavement of opus Alexandrinum that lies in front of the high altar. He also brought with him an artist Odèricus to lay it. It was completed in 1268. Abbot Ware lies buried under his pavement, as is recorded humorously by a line in his epitaph :

Abbot Ware's pavement.

Hic portat Lapides quos huc portavit ab Urbe.

These pavements cannot be laid successfully except with the materials used in Italy : red porphyry, green porphyry or serpentino,[1] and for the white a hard stone called palombino. Other marbles are used in smaller pieces in the patterns, but these are the necessary staple materials. In Italy the ground in which the pavements are inlaid is white marble, which is not found in England, and Odericus has had to use Purbeck, which unfortunately has stood badly and is much decayed.

Besides the pavement, Abbot Ware brought also glass mosaic for inlaying the Confessor's shrine, and an artist who signs himself Petrus civis Romanus, who completed the work in 1280, after the death of Henry III.

The Confessor's shrine.

Edward was in Palestine when he heard of his father's death in 1272, shortly after he had lost his own son Henry. "God", said he, "may give me more sons, but not another father", and he brought home the materials of his father's splendid tomb, which is inlaid with porphyry

[1] Porphyry, which is universally used in these pavements of opus Alexandrinum, was obtained by cutting up old columns and other relics of ancient work. The quarries of porphyry were unknown in the Middle Ages and have only been rediscovered in modern times.

and serpentino and the choicest glass mosaic. It is finished in the highest style of workmanship, resembling and equal to that of the Coronati at Rome; and as Peter the Roman had just finished his work on the Confessor's shrine, we may fairly conclude that he was employed on the king's tomb.

Tomb of Henry III.

On the top lies the bronze effigy of the king, diapered and gilt; rather a high relief than a figure quite in the round, being flattened at the back. The figure is by Master William Torel, goldsmith and citizen of London, who also made the beautiful figure of Eleanor of Castile, Edward's queen, next to that of the king. The fine graceful figure of Henry III. is obviously conventional, the statue of a king, not a portrait of the rather clumsy ungainly original with a drooping eyelid, described by Rishanger.

William Torel.

CHAPTER XXI

ENGLISH FLOWING DECORATED

We have been accustomed to hear the thirteenth century extolled as the high-water period of Gothic architecture, and many art-critics still regard all that followed as a decline from the high standard of that age.

But it is the spirit of Gothic architecture to move on, not to stand still, and the same genius which developed Gothic art out of Romanesque stirred it still to further movement in the fourteenth century and what followed.

Fourteenth century in France.

In France, as we have seen, no change took place, and architecture went on in the geometrical style, only losing all the life and energy that had gone to create it, and becoming dull and uninteresting.

But in England at the end of the thirteenth century there were already signs of a change, which grew into an entirely novel phase of the art.

In a former chapter the construction of geometrical tracery has been explained. It consists of distinct geometrical figures, put together in such a way that though each figure remains distinct, it coalesces at certain points with other figures tangentially, always returning at those points to the modulus of the tracery bar, which is practically given by the mullion. Though melting at these tangential points into one another for a moment and then breaking out again, each figure, circle, trefoil or what not remains a distinct figure, which theoretically could be detached complete.

Geometrical tracery.

The change that took place in England in the fourteenth

century was to unite the several figures, which in geometrical tracery sometimes fitted awkwardly together, by making the tracery bars flow into one another without a break, instead of only uniting at tangential points. Thus in Fig. 38 there are two windows consisting of precisely the same elements, a cusped quatrefoil compartment in the head supported on two lights with cusped heads. But in A this is treated geometrically, and the figures remain distinct. In B the lines flow together without a break. A is a design

Flowing Decorated tracery.

FIG. 38.

in the Geometrical Decorated style, B in the Flowing Decorated style.

The effect of this innovation on the design of tracery may easily be imagined. Instead of simple circular curves we have reversed, compound, or ogee curves. Instead of figures leaving awkward intervals every line fits. Released from geometrical conventions the design of tracery ran free into forms hitherto impossible. The variety of curvilinear tracery is inexhaustible. Cathedrals and village churches abound in beautiful windows in this style, that show infinite variety of invention and free fancy; but the style never runs into the extravagance of the Flamboyant

Effect of flowing tracery.

school in France at a later date, which was probably inspired by the curvilinear style of England seventy years earlier. In all of these curvilinear windows the same system of subordination of orders prevails that obtained in the geometrical system.

Fig. 39 gives some examples of Flowing Decorated windows on a small scale, which will explain the system as well as the larger instances which follow.

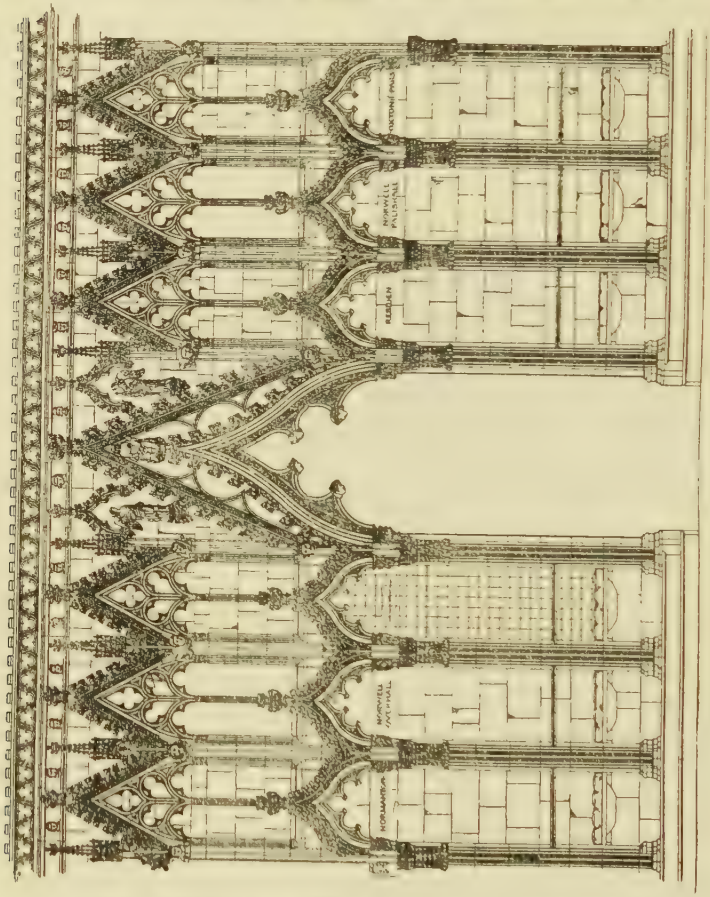
FIG. 39.—Selby.

The central piece of tracery.

In geometrical tracery there is almost always a central figure, generally a circle, or tracery contained in a circle, and the same central figure is to be found in many of the curvilinear windows, as, for instance, in the fine east window at Selby priory, where it is an oval. But it was not so easily managed in the Flowing Decorated style, which tended to spread the reticulation of tracery more evenly over the window space. In the west window of York Cathedral there is a central figure in the head, but it is rivalled by other figures next to it, and is lost in the general plan of the tracery.

Lincoln rose window.

The rose window called the "Bishop's Eye" in the south transept of Lincoln Cathedral is filled with Flowing Decorated tracery, which, with its intricacy of line and figure, almost anticipates, though without



From *The Building News*.

FIG. 40.—Choir Screen, Southwell Cathedral.

its extravagance, the French Flamboyant tracery of a hundred years later.

One of the most perfect examples of the curvilinear style is the choir screen at Southwell. The outside is comparatively simple ; it has three arches with cusping, in which the ogee curve appears. The details show a change from those of the geometrical period. For colonnettes on the piers we have square buttresses, which run up into gablets and pinnacles, and the mouldings are simplified. In the new style we lose the sharp deep-cut channellings of the earlier work, with their rolls and fillets, and have a broader, softer section with less under-cutting.

Southwell choir screen. Change in detail.

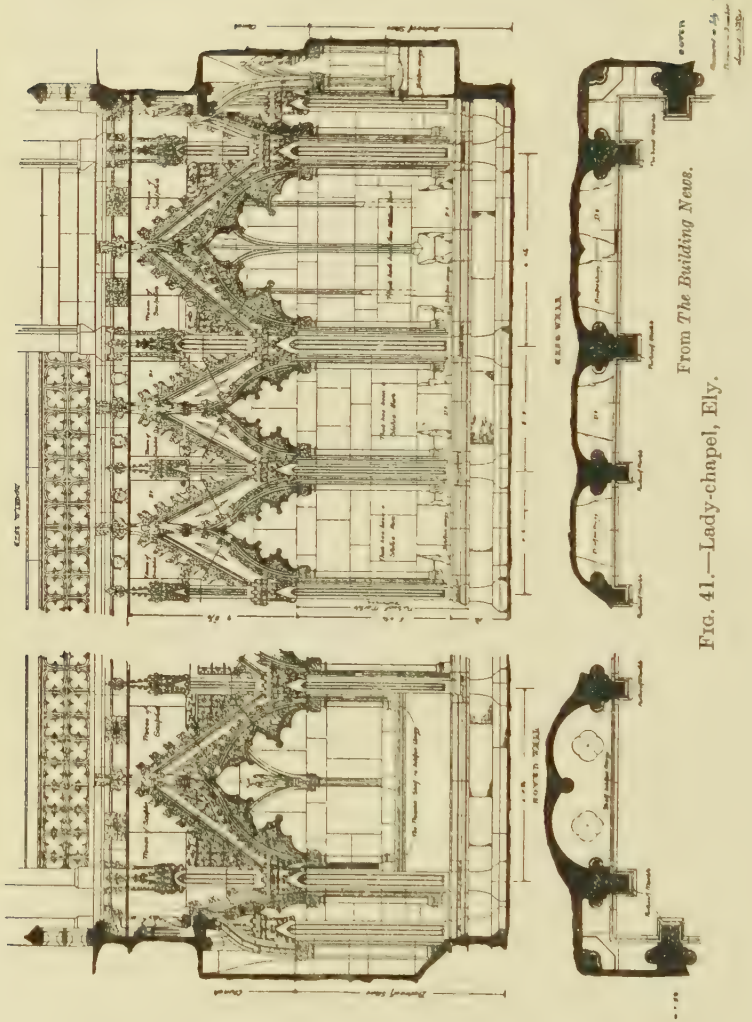
The inside of the screen is much more splendid. The central doorway, under an enriched pediment, has an ogee arched head, inclined forward in a graceful curve. Right and left are stalls for the canons with arched head similarly embowed forward, and surmounted by an upper storey of richly decorated wall panelling with tracery and pedimented heads. The whole is carved delicately with natural foliage, which is arranged conventionally to conform to the architecture. The whole is a work of consummate artistic excellence. Here again one may observe that the piers dividing the stalls, instead of being colonnettes as they would have been in the preceding geometrical style, are groups of slender buttresses with gablets and cresting. This screen dates from the first quarter of the fourteenth century. The chapter-house at Southwell is rather earlier, and the windows have geometrical tracery, but the doorways are carved with natural foliage of remarkable beauty.

Southwell chapter-house.

This chapter-house, being smaller than those described above, though vaulted in stone, is without a central pillar.

A few years before the Southwell screen the Lady-chapel at Ely was begun. It was built between 1321 and 1349, it is said, by Brother John of Wisbeach, one of the monks. If this is correct it is a late example of a monkish architect. The work was done under the direction and superintendence of Alan of Walsingham, the sub-prior and sacrist. The chapel stands apart from the cathedral, only touching

Ely: Lady-chapel.



From *The Building News*.

FIG. 41.—Lady-chapel, Ely.

it at the north-east corner of the north transept. It is a rectangle 100 ft. long by 46 ft. wide, and 60 ft. in height. The stone vault is rather flat in section, and is sustained by very moderate buttresses, in spite of its great space.

The design of the chapel is beautiful, but how can one describe the wonderful panelling of the wall below the windows, which is covered with tabernacle work of the most exquisite design, though now, alas, sadly ruined by barbarous defacement? It is the work of some consummate artist whose name has not come down to us; for it can hardly be the handiwork of Brother John of Wisbeach; and indeed several hands must have been employed upon it.

The design is not unlike that of the inside of the screen at Southwell, but treated in a broader manner, proportioned to its greater extent. The wall is lined with shallow niches, once filled with statues that have been destroyed. The niches have a vaulted back, and pediments surmounting canopies that bow forward, like those at Southwell, on a curved line. The whole is splendid with crocketing, finials and delicately carved spandrils, and has buttresses pinnacled and panelled between the niches. The space above the pediment up to the string-course below the window was once filled with figure sculpture representing scenes in the life of the Virgin Mary, but it is unhappily[1] now in a state of complete mutilation. The whole of this gorgeous wall decoration was originally decorated with painting and gilding, of which some traces remain.

In 1322, the year after the Lady-chapel at Ely was begun, the great central tower over the crossing of nave and transepts fell. It had been built by Abbot Simeon, brother of Bishop Walkelyn, the builder of Winchester Cathedral, and was finished before his death in 1093. In its fall the tower brought down with it parts of the four corners of the cruciform building over which it stood. When the ruins were cleared away there would have been a large open area, probably roughly octagonal, in the centre of the church. This

Ely: fall of tower.

[1] These spaces are shown blank in the illustration.

open space would be fertile in suggestions to an architect's eye, and it appealed to the imagination of Alan of Walsingham, the sub-prior, who had already been engaged on the plan of the Lady-chapel. It occurred to him to devise some mode of keeping this open space in the interior of the church when rebuilding, and the result is the present octagon in the centre of the church, a feature novel and unique on this side of the Alps in Gothic architecture.

Ely: the octagon.

The commune of Florence were at this time puzzling their brains over their new cathedral, S. Maria del Fiore, which Arnolfo, who had lately died, had planned for them with a central octagon. Alan of Walsingham may have heard of this: he may even have been at Florence, for churchmen travelled in those days much more than we are apt to imagine. Be this how it may, he resolved to have his octagon, and rebuilt the piers on an irregular octagonal plan ready to receive it. Then arose the same question that puzzled the syndics of Florence, namely, how to cover it in—a question that was not solved by the Florentines till Brunelleschi contrived his majestic dome, more than a hundred years after Arnolfo had been in his grave.

Alan's octagon was about 66 ft. in diameter, and he surrounded it with eight piers, which were fairly well abutted by the adjoining arcades. He may have intended a dome of brick, but the size was bigger than the domes he might have seen abroad. That of Aix-la-Chapelle measures only 47 ft. 7 in.; that of S. Vitale 50 ft.; that of the cathedral at Pisa only about 40. And at Ely the abutting walls were weakened with triforium and clerestory. He therefore mistrusted his supports, and above all, it was most unlikely that he could find any one, either in England or in France, who could build a dome of that size either in stone or brick at that date.

Roof of the octagon.

His octagon, therefore, is covered with timber. The construction is simplicity itself. High above the roof of the church he made an octagonal frame of which the angles alternate with those of the ground plan;

[From "The Architect."

ELY CHOIR FROM THE OCTAGON.

To face page 179.

and to each angle of this smaller octagonal frame, which represents the ring of a dome, he put vast props of timber inclining inwards from the angles of the stone octagonal piers. On this inner ring or octagon he raised his lantern with large windows to light the interior. All Britain had to be searched to get timber big and sound enough for these great props. These props are not exposed, but the whole structure below the ring is enclosed with panelling arranged like pendentives, or the conoid grouping of ribs from a capital in an octagonal chapter-house. These, of course, are all in timber, and have no constructional purpose, but are merely ornamental. All the work is done by the sixteen great props.

Timber roof of octagon.

Together with the octagon took place the rebuilding of the adjoining work which had been thrown down by the fall of the tower. Three bays of the choir next the octagon had to be rebuilt, and they are in the same style as that of the Lady-chapel and octagon, though they seem to be by a different hand. The traceries of the clerestory and triforium are especially light and airy, and this is characteristic of a great deal of the Gothic work in the eastern counties, as at Dedham, East Bergholt and Little Dunmow, which is a very remarkable building, with exquisite tracery, though the church is only a fragment of a larger one.

Eastern county tracery.

Lincoln has some screen-work with ogee canopies like that at Southwell.

The fourteenth century work of Bishop Gower at S. Davids, besides its charming design, is remarkable as affording one of the few instances of polychrome masonry north of the Alps. The ruined bishop's palace has an arcaded parapet built with chequers of purple and yellowish-white stone, on which I can remember a chimney all of chequer work, which exists no longer. The bishop himself lies on an altar tomb in his chantry under the organ-loft, which is a beautiful piece of fourteenth-century Gothic. All his work at S. Davids is marked by great refinement, and has a distinctive character.

S. Davids: Bishop Gower.

There is a remarkable piece of fourteenth-century tabernacle work on the back of the feretory screen at Winchester Cathedral. There are nine niches, each of which once contained two figures mostly of Saxon Saints whose names are engraved below. The view over this screen through the arches is one not likely to be forgotten.

Winchester feretory screen.

One of the most remarkable monuments of Curvilinear Decorated is the tomb of Lady Percy at Beverley, who died in 1365. The amount of sculptured detail upon it is astonishing. Besides the wealth of ornament in crockets, pinnacles and finials, the very points of the cusps have hovering angels ; others stand on brackets, and the lower of the two pediments bows forward to support, in the apex of the upper pediment, the group of Christ receiving the soul of the lady in a napkin. The beauty of line and cusping is beyond all praise.

The Percy tomb, Beverley.

Rather earlier than this famous tomb are the three canopied tombs on the north side of the Sanctuary at Westminster Abbey. The earliest and simplest is that of Aveline, Countess of Lancaster, who died in 1273. The largest is that of her husband, Edmund Crouchback, Earl of Lancaster, brother to Edward I., who accompanied him to the crusade and died in 1296. His tomb has a triple canopy. The third and most beautiful of the three tombs is that of Aymer de Valence, Earl of Pembroke, son of Henry III.'s half-brother, William de Valence. He died under somewhat mysterious circumstances in France in 1324. His tomb is one of the gems of fourteenth-century art. It has a single arched canopy with graceful ogee cusping, pedimented with a circle in the tympanum containing a figure of the knight on horseback, and with brackets on the sides that once bore figures of angels. On the altar-tomb below each of these tombs are little figures of mourners in niches. The whole of these tombs has been richly decorated with painting and gilding on gesso and had inlays of coloured glass, now lost.

Tombs at Westminster.

Aymer de Valence.

Vaulting during the later Decorated period was further elaborated by multiplication of ribs and the addition of lierne ribs between them, making regular geometrical figures, with bosses at the intersections that were carved and decorated. The capitals of this period have lost the spring of the earlier school, and take the form of wreaths of natural foliage round the head of the columns. They are sometimes crowded and confused.

Fourteenth-century vaulting.

One point to be noticed in this later style is the practical disappearance of the triforium as a feature in the bay. The origin of the triforium consisted in piercing the blank wall that surmounted the arcades of the early basilican churches, corresponding to the pitch of the lean-to roof over the aisle outside. It will be remembered that this blank wall offered opportunity and was used for decoration by painting or mosaic, as at S. Apollinare Nuovo in Ravenna, where it is covered with the mosaic processions of saints. When the builders arrived at the art of vaulting the aisles, advantage was taken of the opportunity of making a gallery on the vault, and the front wall was pierced to give it light. Hence the universal triple arrangement of storeys in the Gothic interior. The triforium still corresponded with the space between the aisle vault and the lean-to roof; but as the aisle roofs became flatter this space diminished, and became useless as a gallery. In the choir at Wells the triforium is represented by panelling the walls up to the clerestory, and by a passage in the wall through the piers. The triforium is in fact absorbed into the arcade. In the same way in the choirs of Lichfield, Selby, and Melrose it is absorbed by the clerestory, which is brought down to cover it. At Winchester in the nave it is represented by a sort of balcony in a prolongation of the clerestory downwards, and in fact the triforium at this period disappears altogether. At Bath Abbey, where the aisle roofs are flat, there is no pretence of a triforium whatever, not even by a passage in the wall as in other cases mentioned.

Disappearance of triforium.

In France the triforium did not always give light to

the space behind. At Amiens it is closed by a wall. Later this wall was pierced with windows as at S. Denis and Beauvais, the aisle roof being lowered to expose them. In this way the triforium became a triforium no longer, but simply a range of windows like the clerestory above, with which it was generally connected by a continuation of the mullion downwards.

French triforium becomes a window.

In concluding this chapter on the Flowing Decorated style which prevailed in England during this century, I would again point out that it is peculiar to our own country. There was nothing like it in other countries.[1] In France and Germany Geometrical Gothic continued to drag on an enfeebled existence, from which all the energy of the earlier work had evaporated. In England, on the contrary, the change from strict Geometrical Gothic to the Flowing style brought in fresh life and original conceptions. The fourteenth-century window tracery was something quite new, and was adopted on the grandest scale. Those at the churches of Heckington and Sleaford are beautiful examples of the style (Fig. 42). The great Curvilinear east window of nine lights (Fig. 43) in Carlisle Cathedral is 59 ft. 6 in. high by 33 ft. wide, and there are other windows at Selby and elsewhere of dimensions not far inferior. But the new style introduced novelties into all the decorative work, altering all the details of the architecture as well as the sculpture. The difference is between the wall-arcading of Westminster Abbey and the screen of Southwell, or the Lady-chapel at Ely; between the capitals of the choir at Lincoln and those of the chapter-house at Southwell, or of the choir of Selby. The use of detached columns became rarer or disappeared; simpler broader forms appeared in the mouldings and less attention was paid to

Flowing Decorated peculiar to England.

Its effect on detail.

[1] This distinctive and exclusively national character of the Curvilinear Decorated style in the fourteenth century is not properly insisted upon in books on architecture. In many handbooks it is not distinguished from Geometrical Decorated, but all included under the title "Decorated".

the logical expression of constructive features, which at

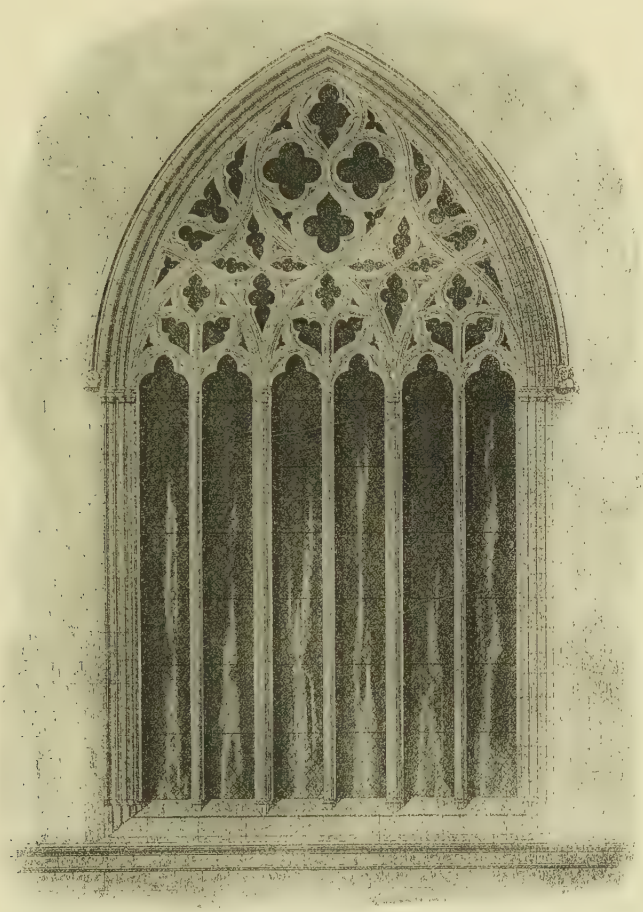


FIG. 42.—Sleaford.

such an advanced stage of the art might be taken for granted.

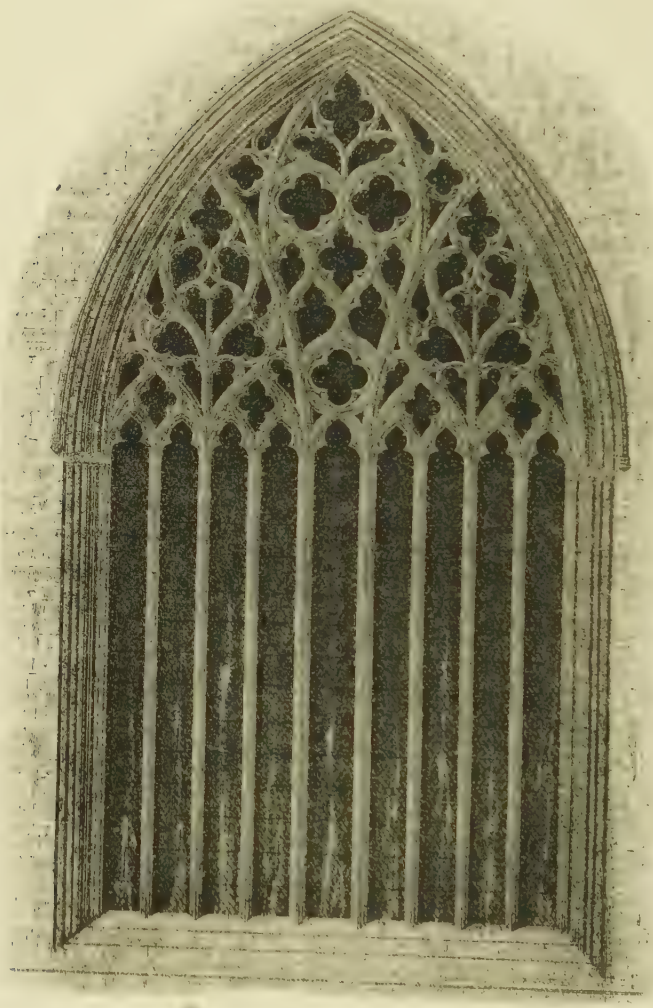


Fig. 43 — Carlisle Cathedral: East Window.

[*Photo, A. H. Pitcher.*

GLOUCESTER CATHEDRAL.

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CHAPTER XXII

ENGLISH PERPENDICULAR GOTHIC

In the middle of the fourteenth century, when the Flowing Decorated style was running its course without any sign of failing, and when it might seem that all the resources of the style were still unexhausted, a sudden change came over English architecture. The graceful flowing lines of the Decorated window stiffened themselves into upright bars that ran through from cill to head, the wall panels became more vertical, and square divisions took the place of flowing lines in decoration. The easy grace and genial freedom of the current style was superseded by a certain dry severity in design that quite altered the character of the art. In short, the Flowing Decorated style yielded to the Perpendicular.

Change to Perpendicular Gothic.

This new style was as distinctively English as that which it came to succeed. Except in the church of Notre Dame at Calais, which was built while Calais was English, I know of no example of Perpendicular Gothic beyond these shores.

An English style.

The champions of pure thirteenth-century Gothic in the last century barely tolerated the Flowing Decorated style, which they thought a deviation from orthodoxy. But for Perpendicular Gothic they had no term bad enough and they overwhelmed it with obloquy. It was Gothic debased and in decrepitude, unworthy to be called Gothic at all; and Perpendicular work suffered badly at the hands of the restorers of our churches in the fifties and sixties of the last century, who destroyed it ruthlessly when

Objections to it.

there was any warranty for an older piece of work, its predecessor.

That in some respects the style is open to detraction may be admitted. Its mouldings are less artistic, its traceries are apt to become monotonous, or even commonplace and tiresome. But one can hardly pronounce decadent a style which produced the glorious towers of Gloucester and Canterbury; those of Magdalen College, Oxford, and the country round the Mendips; Boston "stump" and the fine steeple of Louth; the churches of the Fens, and the great chapels of Windsor, King's College at Cambridge, and Henry VII. at Westminster—works of which one might say art can do no more. To condemn as decadent an art which has given us these marvels is surely mere pedantry.

Fine works in Perpendicular.

At no time did English architecture show more life, greater mastery of construction, greater skill in dealing with difficult problems, greater ingenuity in invention. The new fan-vault revolutionized the art of vaulting, and the beautiful oak roofs of this period were something new to the art. Carpentry in the preceding styles had been clumsy, and, compared to the masonry, backward and inartistic. To this period we owe most of the stall-work in our cathedrals, which can hardly be rivalled beyond this country, while English fifteenth-century painted glass has a beauty all its own.

Skill of fifteenth-century masons.

Perpendicular Gothic was a natural outgrowth of the art of the day. There had been some foreshadow of it in the east window of Wells, where mullions run straight up into the head of the arch; and among the delicate flowing traceries of Little Dunmow is one that almost anticipates the Perpendicular window. But the change came about with extraordinary rapidity. It is supposed to have begun at Gloucester, where in a country of fine stone there was a skilful school of masons whose influence might be felt far and wide throughout the craft. The new art began rather in a tentative way. Abbot Wygmore's

Origin of Perpendicular at Gloucester.

[*Photo, A. H. Pitcher.*

GLOUCESTER CATHEDRAL

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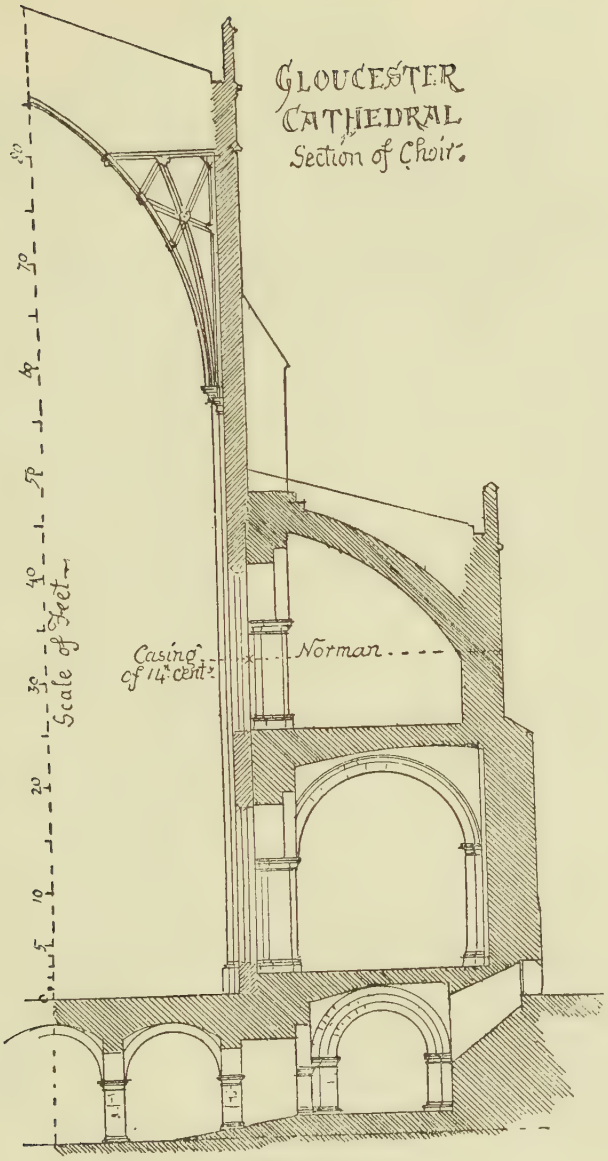
GLOUCESTER
CATHEDRAL
Section of Choir.
Scale of Feet
Casing of 14th cent.
Norman

FIG. 44.

south transept window, erected between 1330 and 1337, might pass for a Decorated window but for the two upright bars of the second order which run up to the head, piercing the arched rib of the main order. In the early Perpendicular windows at York there are still faint traces of the flowing line.

Shrine of Edward II.

Abbot Wygmore's work at Gloucester was the beginning of a grander scheme. The abbey had become very rich. Like similar institutions, its fortune depended on the popularity of the local saint, and Gloucester was not well furnished in this respect. When, therefore, the body of Edward II. had been refused burial at Bristol and Malmesbury for fear of Queen Isabella and Mortimer, Abbot Thokey (1307–1329) saw his chance, and enshrined him in a splendid tomb in his Abbey at Gloucester. Pilgrims began to flock to the tomb of the Lord's anointed, the necessary miracles were not long in forthcoming, and the abbey soon became so rich that it might have rebuilt the whole church. Fortunately it did not do that, but the whole east end was ingeniously given a new character while retaining the fabric. The work began with Abbot Wygmore's recasing and vaulting the South transept. The alteration of the choir was a more serious operation. The old Norman choir had not the lofty cylindrical columns of the nave, but was low-arched with a very large triforium like those in the earlier Norman churches at Ely, Caen and Norwich. Before 1377 Abbot Stanton rebuilt the east end, but the difficulty was how to disguise the clumsy proportions of the lower storeys. His architect managed this by throwing over the whole bay a veil of Perpendicular tracery so as to obliterate the horizontal divisions of the old Norman arcade and triforium, which can still be seen if looked for behind the tracery that masks them (Plate XLI.). To fix his screen he cut back to a flat face the huge Norman piers of the two lower stages, and above he built a splendid range of clerestory windows, raising the choir roof 20 ft. above that of the Norman nave.

Gloucester choir.

The construction is extraordinarily slight: the screen

GLOUCESTER—VIEW OF CHOIR FROM TRIFORIUM.

To face page 188.

WINCHESTER CATHEDRAL—THE NAVE VAULT.

To face page 189.

in front of the Norman pillars is only 16½ in. thick, and the clerestory stage has no flying-buttresses but a simple buttress standing on the thick Norman wall of the triforium. The alteration of the East end is masterly; it forms one great window, built on the wall of the semicircular Norman ambulatory, which gives the two side compartments a cant inwards. The effect of this great wall of glass facing you as you enter the choir, combined with the soaring effect of the upright piers of the screen-work on the side walls and the rich intricacy of the splendid lierne vault overhead, is astonishing. The choir at Gloucester as remodelled under Abbot Stanton is a work of genius. It seems to have been finished before 1351.

Lightness of the construction.

These lierne vaults, as they are called from the short *liernes* or trimming pieces fixed between rib and rib, continued to the end of the Gothic period, but their intricacy in the fifteenth century led to the invention of the last development in the system of Gothic vaulting. An example of a lierne vault at Winchester will show how the whole surface of the vault came to consist of a network of ribs, great and small, in every interval of which a separate "filling-in" piece had to be fitted. It may easily be understood that the least movement in the side walls — the least settlement of a pier—would disarrange this elaborate puzzle-work, and make some of the pieces loose. And this often happened, and to this day gives constant trouble in the repair of this kind of vault. It was this, no doubt, that suggested uniting rib and panel in one substance, a plan that of course upset the whole theory of rib and panel vaulting. The entire vault now became a shell of solid masonry; the ribs, instead of carrying the vault, became mere surface ornaments, mere panelling, decorating the underside of the vault, and no longer elements of the construction.

Lierne vaulting.

Fan-vaulting.

The conoids formed by the sheaf of ribs springing from the vaulting shafts thus became solid structures, each finishing on a semicircular line at the crown, which, meeting other similar semicircles, left a square space in the

middle at the crown of the vault, which was filled in with solid masonry decorated like the conoids with panelling.

This is fan-vaulting, and it had its origin at Gloucester in the beautiful cloister which was begun in 1351 and finished in 1412. It was a precocious invention and did not travel far till some years afterwards, when it was adopted on a grander scale. It was not till the end of the fifteenth century that a fan-vault was built at Peterborough over the retro-choir. King's College chapel at Cambridge, which was begun in 1447, was intended to have a lierne vault, and the earlier chapels are vaulted in that way. It was not till 1512 that a contract was entered into for a fan-vault with John Wastell, master-mason of the King's works. The fan-vault of S. George's Chapel, Windsor, was finished in 1508, and that of Henry VII.'s Chapel at Westminster some four years later. There are fan-vaults at Bath Abbey and at Oxford Cathedral. Last of all, in 1630, post-Gothic times, Dr. Fell erected a fan-vault over the staircase to the Hall of Christchurch, Oxford, with the help of an architect from London of the name of Smith, a wonderful work for such a date.

Gloucester cloister.

Peterborough.

King's College, Cambridge.

There are varieties of construction in these roofs which are interesting, but to detail them would involve technical explanations too elaborate for the present work. The same may be said of the beautiful vault of the Divinity School at Oxford, into which fan-vaulting enters to a certain extent. On a miniature scale there are lovely little fan-vaults over the oriels of college halls, Eltham Palace, the chantries at Bath, Winchester, Christchurch Priory and the tombs at Tewkesbury. The fan-vault is peculiar to this country and unknown abroad.

Variety of fan-vaulting.

Beginning at Gloucester, the Perpendicular style soon spread far and wide. In 1345 Bishop Edington pulled down the west end of Winchester Cathedral and rebuilt it, together with the two next bays of the nave, 40 ft. short of the original west front. The great west window is divided

Spread of Perpendicular style.

Photo, A. H. Pitcher.

GLOUCESTER CATHEDRAL—THE CLOISTERS.

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CAMBRIDGE KING'S COLLEGE CHAPEL.

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like that at Gloucester into three parts by two massive mullions, each part being divided into three lights. There are three transoms in the two side divisions, and four in the central one. The whole is in a perfectly rigid Perpendicular style, with no trace of Decorated feeling. Bishop Edington's intended rebuilding of the nave was

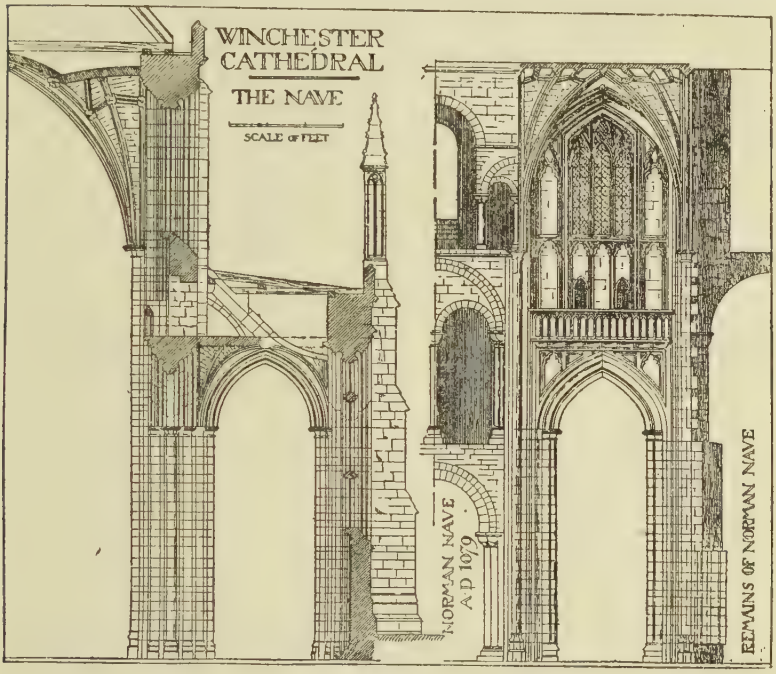


FIG. 45.

interrupted by his death and left to his successor, William of Wykeham, in 1366. The nave at that time was Walkelyn's Norman structure, like what remains of his work in the transepts, with a low arcade and a great triforium, an arcaded clerestory and a wooden roof. The problem was not unlike that proposed to William of Sens at Canterbury — to get a better

Winchester.

proportion in the bay by raising the arcade, and to provide for a stone vault. But at Canterbury the fire had made a clean sweep of the interior. At Winchester no such disaster had occurred, and what Master William Wynford, the master-mason, did was to retain most of the old fabric, but to cut out the Norman arches, throwing the triforium into one with the space between the columns, to vault the aisles at this higher level, to remodel the clerestory and to vault the nave. The triforium disappears, absorbed by the clerestory, and is only represented by a sort of balcony between the vaulting shafts. The nave piers, which remained up to the springing of the old nave arches, were at first shaped by paring them down to new sections, and in the western part of the nave the wide mortar joints of the Norman period may be seen up to the old springing level. Afterwards this plan was abandoned, and the rest of the old piers were recased with new masonry. The result is that the piers retain the bulk of the Norman period though clothed in the garb of the Perpendicular style, and this gives Winchester nave an air of massive grandeur wanting in that of Canterbury, which was built at the same time as Wykeham's work. Behind the later work the old triforium arch still remains, and in places may still be seen in that storey the wall shafts that ran up to carry the trusses of the original wooden ceiling.

Winchester nave.

For nothing is the Perpendicular period more distinguished than for its towers. There are few finer than the central tower at GLOUCESTER, which is perfect in proportion and in outline, which is given by skilfully gradated buttresses. Its architect was Robert Tally, a monk of the abbey, and afterwards a bishop of S. Davids. His name and performance is recorded on an inscription over the western tower arch.

Perpendicular towers: Gloucester.

The lovely tower of MAGDALEN COLLEGE, Oxford, is not buttressed, but the octagonal angle piers are delicately set in at each stage to secure a good outline. Plain below, it increases in richness of architectural features as it rises to the parapet and pinnacles,

Magdalen.

TAUNTON—S. MARY MAGDALENE.

To face page 193.

which was happily managed. It was built between 1492 and 1498, and the design is attributed to Wolsey, but apparently only because he was bursar of the college about this time. There is no reason to suppose him an architect.

Bell-Harry tower, the central tower of CANTERBURY, was built by Prior Goldstone in 1495. Like Magdalen tower it is unbuttressed, and it has projections at the corners giving strong vertical lines to the structure. It is so different from its rival at Gloucester that it is difficult to compare them ; but it may be said that each in its own sphere is supreme.

Canterbury.

Somersetshire abounds in lovely towers. Those at Glastonbury and Taunton (Plate XLV.) are the most famous, but there is none finer than that of S. Cuthbert at Wells. Round about the Mendips they cluster thickly, at Banwell, Cheddar, Chewton-Mendip and Wrington. There are others equally worthy of notice at Evercreech, Ilminster, Leigh-on-Mendip, Mells and North Petherton.

Somerset.

Evesham has the gateway tower once leading to the vanished Abbey, which is covered with panelling from top to bottom. S. Neots has a fine tower, but the most splendid of all for its exterior decoration with niches and panelling is that of Wrexham, which was finished in 1506.

Of spires during this period there is a magnificent one at Louth, and there are two fine ones at Coventry. Also a graceful one in Stamford to All Saints Church.

The timber roofs of this period are one of its glories. Above all, there is the stupendous roof of Westminster Hall, which was built in the time of Richard II. between 1394 and 1398, and is the finest wooden roof in the world. The trusses are of hammer-beam construction, and are supported by massive buttresses outside. The roof of Wolsey's hall at Hampton Court is magnificent, and most of the colleges at our two great universities have fine timber roofs in their halls. The roofs at Eltham Palace and Middle Temple Hall are also remarkable.

Perpendicular roof.

Westminster Hall.

The Fen churches.

Most of the fine churches in the eastern counties have handsome roofs of timber, richly adorned with figures of angels, crestings and battlementing, and with bosses or plaques of carved woodwork at the meeting of the main timbers.

English aversion from flying buttress.

Before, with the close of this chapter, we leave the subject of English Gothic, there is one point that may be mentioned in which it differs from that of France, and that is the aversion which our architects seem to have felt from the flying buttress. The French and Germans, on the other hand, seem to have revelled in it, and many of their apses are so crowded with flying buttresses as to seem smothered with them. In England, on the contrary, they are hardly even erected into features of the architecture, but were treated with contempt, and when possible they are hidden under the aisle roofs. At Winchester there are flying buttresses, curiously combined with the aisle vault and too low down under the aisle roof to be of any use. At Gloucester and Worcester there are a few placed here and there under the aisle roof, where I suppose they were wanted for some local weakness. At Salisbury there are flying buttresses under the aisle roofs, too low to be of much use. In French churches the upper storey is reduced in thickness by omitting the passage-way of the earlier churches, which demanded a thicker wall. This made the wall too thin to resist the vault, and required a flying buttress. The English retained the passage and the thick wall of the top storey to the last, and these walls of 7 or 8 feet thick were substantial enough to resist the thrust of the vault and make a flying buttress superfluous. With an excess of daring the lierne vault of Gloucester choir rests on a thin wall, with a very small exterior buttress supported on the thicker wall of the Norman triforium below.

Italian aversion from flying buttress.

The Italians had a similar aversion from the flying buttress and avoided it, even by the use of iron ties to hold in their vaults.

In reviewing the Perpendicular style one finds it inspired by a different sentiment from that of preceding periods. Therein it corresponds with and expresses the

temper of its age. It is less religious and more secular. The age of monasticism was past. Never had the spiritual and moral hold of the Church on the people been less, and at the same time never had its wealth been greater. It was attacked in its doctrines from within by Wyclif, and by the baronage hungering after its riches from without. The regular clergy sank into contempt. Chaucer's monk in the *Canterbury Tales* is a fine gentleman, thinking of nothing but sport. The Prioress is a dainty lady, with a motto on her brooch, *amor vincit omnia*. The Friar is a merry soul, an easy man to give penance, who could sing and play on a rote, and "lisped for his wantonness". On the other hand, the poor Parson of the town was a

Secular character of Perpendicular style.

> learned man, a clerk,
> But Christe's lore, and his Apostles twelve
> He taught, but first he followed it himselve.

From this time no more conventual churches were founded, and no new cathedral arose; but the parish churches grew larger and finer, sometimes even rivalling the cathedral in size and magnificence, as the parochial and secular clergy rose in popular esteem.

At this time, too, secular and domestic buildings first begin to play a part in the architecture of the day. The time of the gloomy *château fort*, the baronial castle, was passing away, and the Tudor mansion had large mullioned and traceried windows like the churches, for there was but one style for both, only modified by requirements of convenience. We have the palace of Wolsey and Henry VIII. at Hampton Court, and some of the earliest domestic Gothic is to be found in our old schools and universities—at New College, All Souls, Magdalen, Christ Church, Brasenose and Corpus at Oxford; at Winchester and Eton; at Queen's, S. John's and Trinity at Cambridge, where young men and boys still live and study in rooms where lads have lived and studied for five or six hundred years before them.

Domestic architecture.

End of English Gothic.

But with the Perpendicular style we come to the close of the Middle Ages, and to the verge of the next architectural revolution.

CHAPTER XXIII

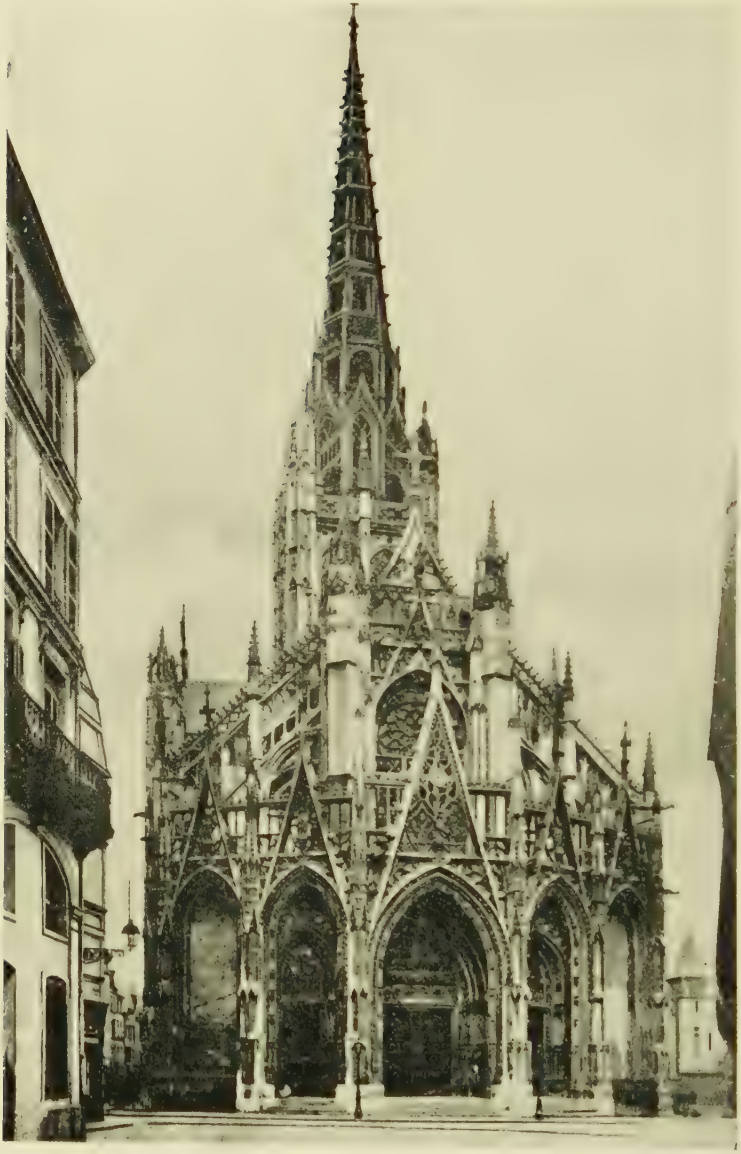
FRANCE—THE FLAMBOYANT STYLE

FRENCH architecture, as has been already explained, underwent no such change in the fourteenth century as that which took place in England. While from 1320 to 1350 the Lady-chapel at Ely and Alan de Walsingham's work in Flowing Decorated architecture were progressing, the eastern part of S. Ouen at Rouen (1339), the lateral chapels at Coutances (1371), and those at Amiens (1375) were built in pure Geometrical Gothic. It was not till the end of the century that a change began, and that the stiff forms of the earlier Gothic, which had long outstayed its time, and become stale, relaxed their severity and gave place to a freer form of design. And when the change came it came suddenly. M. Eulart and M. Colfs and other writers derive it from English example. The flowing line had become the principal motive of English architecture seventy years before; during which time, in peace and war, the countries had been in constant communication; and the suddenness and completeness of the change is consistent with the adoption of an idea from outside, rather than an original conception from within. There was no intermediate or transitional period; the new style appears fully developed as early as 1412. The Flamboyant church at Caudebec was begun in 1426, that of S. Maclou at Rouen in 1432, and when the English had been finally expelled in 1456 the style spread rapidly to all parts of the country.

Flamboyant style.

English suggestion.

But though the idea might be derived from the curvilinear work in England, which had already given



ROUEN S. MACLOU.

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way to the Perpendicular style before the beginning of Flamboyant architecture, the French style took at once a distinct national character, quite different from the English pattern. The English art never lost an air of restraint; the flowing ornament, however lavishly applied, was kept well within bounds, and in the most elaborate traceries the idea of construction was not lost. There is nothing in the ornamental work of French Flamboyant in the least like the delicate work of the Lady-chapel of Ely, or the Percy tomb at Beverley.

Flamboyant difference from English curvilinear.

It is mainly in window traceries that English example shows itself, but the beauty of the English curvilinear tracery is lost. There is a window at S. Germain's church, Amiens, like one at Selby, but it is the Selby window spoiled, and the French traceries ran wildly into extravagant forms, often quite unconstructional, as, for instance, the Fleur-de-Lys, into which tracery bars are twisted at S. Quentin and elsewhere. One remarkable novelty in the Flamboyant style was the difference in the mouldings. In early French work mouldings seldom went beyond a roll on the edge of an order; contrasting strongly with the undercut mouldings of early English work. But in the Flamboyant style the mouldings were extraordinarily keenly cut and sharp, and deeply hollowed, throwing dark shadows with strong alternations of light and shade in the arches and cornices. As in English Perpendicular the triforium disappeared as a separate feature, and was united to the clerestory. Capitals are often omitted, and the arch mouldings run down unbroken to the floor. In many cases, as at S. Jacques, Lisieux, and the church at S. Lo, the arch mouldings die into or spring out from a plain cylindrical column, involving nice problems of masonry. The interior of S. Maclou at Rouen is a good example of Flamboyant in its earlier stages. The triforium is united with the clerestory; the windows have flowing tracery of a good type, and the arch mouldings run down to the floor without the interruption of a capital.

Flamboyant mouldings.

S. Maclou, Rouen.

The porch of that church is a marvel of Flamboyant work ; all the resources of the style are lavished upon its five canted arches, with their pierced and traceried pediments, open parapets, and pinnacles.

The west front of the Cathedral of Rouen, which is illustrated by a beautiful plate in Turner's *Rivers of France*, is a marvel of Flamboyant architecture. As at Lincoln it has embedded in it the old Romanesque doorways, and the Romanesque Tour de S. Romain remains on the north flank. The rest is encased in Flamboyant screen-work of the most elaborate richness. The front is flanked on the south by the Tour de Beurre, enriched in a bewildering way with panelling niches, arcading and pediments, and finishing with an octagonal storey between four tourelles. The outline of this tower is most successful, and it is a triumph of the Flamboyant style.

Rouen west front.

It has a rival in the central tower of S. Ouen, which, however, loses in comparison by being not seen in full height from the ground. The octagon here plays a larger part in the design than that of the other towers. It is hard to say which of the two towers is the more beautiful.

S. Ouen.

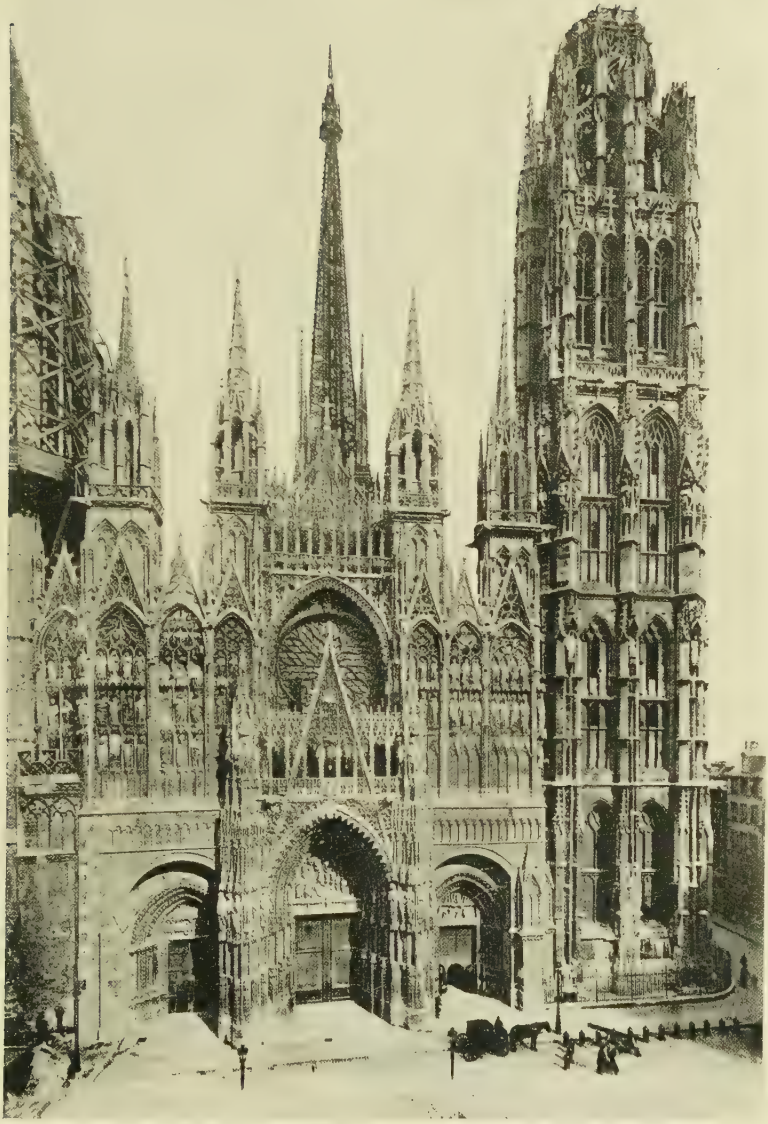
The immense brown brick Cathedral of ALBI, with bastions for buttresses, like a fortress, was begun about the middle of the fourteenth century. It consists of one vast nave, vaulted from end to end, and flanked by chapels in two storeys between great lateral buttresses. The vaulted roof is painted.

Albi.

In the fifteenth century the choir was constructed by screens of elaborate Flamboyant work, set within the nave so as to leave a wide passage outside between the screen and the side wall. The inside of the screens consists of stall-work in stone, carved, canopied and painted, and the outside has niches with excellent statuary. The intricacy and delicacy of this work is extraordinary.

There is nothing in Flamboyant architecture more lovely than the west front of S. Wulfran's church at ABBEVILLE, with its twin towers. And the

Abbeville.



ROUEN CATHEDRAL—WEST FRONT.

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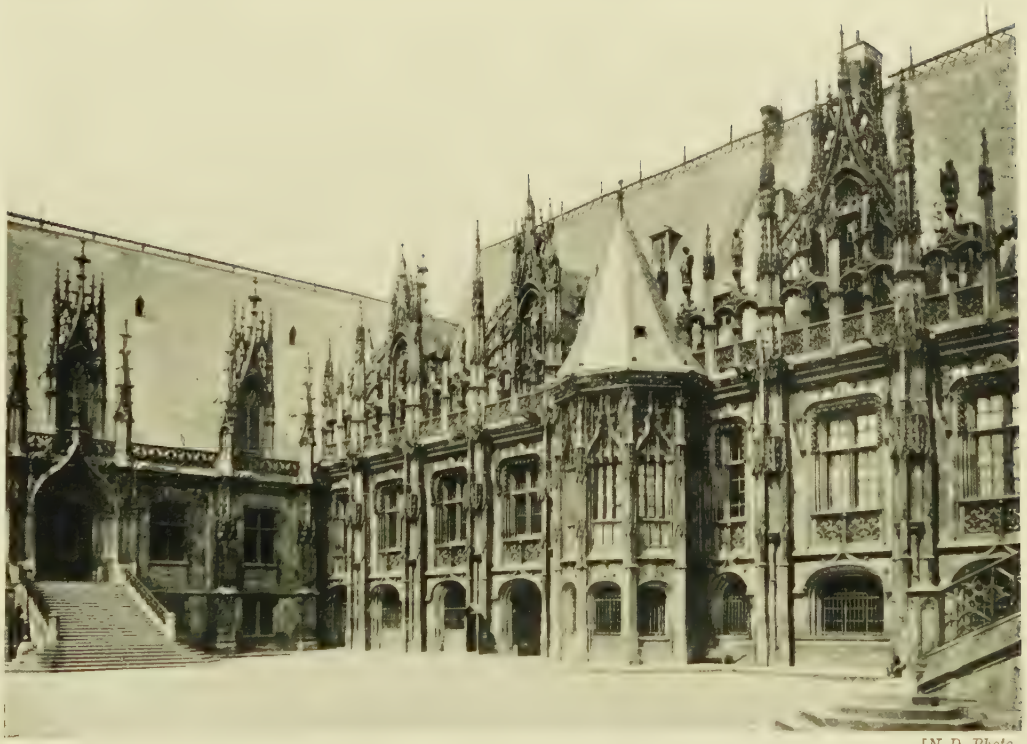

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ROUEN—PALAIS DE JUSTICE.

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fine church of S. Riquier, a few miles away, is another remarkable building of this style.

At this time in France, as in England, domestic and civic buildings begin to take their place in the architecture of the day. At S. Quentin there is a delightful little Hôtel de ville, which reminds us that we are getting near the Netherlands, the country of the great civic buildings of Bruges, Oudenarde, Ypres, Louvain and Brussels. The influence of Flemish art makes itself felt also on the architecture and sculpture of Abbeville, and even on the screen of S. Firmin at Amiens. At Bourges we have the magnificent house built for himself by the unfortunate Jacques Cœur, and the Hôtel Cujas, now a museum. In the same city is the building by tradition the house of Charles VII. during the English occupation, when he was little more than *Roi de Bourges*. It is now the Lycée, and is full of interesting detail.

Domestic architecture.

Bourges.

In the treatment of their dormer windows the Flamboyant architects put no limit to their extravagance. Those of the Palais de Justice at ROUEN are so smothered in pinnacles, panelling and tracery that the window itself is lost in its decorations.

Rouen Palais de Justice.

In 1500 Martin Chambiges began to build the south transept of BEAUVAIS Cathedral. It is of the full height of the choir, and is perhaps the most imposing monument of Flamboyant architecture. The similar Flamboyant transept at Senlis was built by Martin's son Pierre, who also finished the work at Beauvais. In both these works there is a contrast between the heaviness of the massive buttresses and main architectural features and the extraordinary delicacy and minuteness of the panelling, niches and canopies with which they are covered. This smaller decorative work, in fact, accentuates the heaviness of the general effect.

Beauvais and Senlis.

But this brings us to the end of the Flamboyant style of Gothic architecture in France. Classical forms began to creep in and to be mixed with Gothic construction. The east end of S. Pierre at Caen is a curious mixture of Gothic and Classic. The

S. Pierre, Caen.

construction is absolutely Gothic. We have the traceried window under a round arch; the regular chevet with ambulatory aisle and chapels, as in all the Gothic churches; the regular construction of vaults sustained by flying buttresses, all as at Amiens or Beauvais; but all the details of the ornament are quite novel, and though certainly not real Classic, they aspire to rank with the work of the rising neo-Classic school.

End of French Gothic.

Flamboyant architecture has a charm of its own. The dignity of the earlier styles is all gone: all is gaiety and luxury. With all its extravagance and wildness, it is so surprising and amusing that much may be forgiven it. At all events, it came to breathe new life again into an art that was worn out and had nothing to offer the world but stale repetitions.

CHAPTER XXIV

GERMANY

THE history of architecture in Germany begins with Charlemagne. Except the few fragments left by the Romans, nothing remains there older than his time. Eginhart, his secretary and biographer, says he was a great builder, and repaired the churches throughout his dominions. He only names two buildings, however, as seeming "not unworthy of mention": the bridge at Moguntium, which was of wood, perhaps of boats, and the "basilica of the most holy mother of God, constructed with wondrous workmanship at Aquisgranum".

Charlemagne.

This basilica at Aix-la-Chapelle was a great work for that age. It was designed to be also the royal tomb-house, and here, in fact, Charlemagne was found, when his tomb was opened in 1065, seated on his throne, crowned, with sceptre in hand, imperially robed, and with the Gospels on his knee.

Aix-la-Chapelle.

The building, which remains still, was an exotic at that time in Austrasia, and quite beyond the means and skill of the native builders. Eginhart says marbles and columns were imported from Rome and Ravenna, and the palace of Theodoric is supposed to have been stripped and left to ruin at this time to supply material for Charlemagne's Austrasian basilica. The plan is obviously an imitation of the church of S. Vitale. There are no exedrae, and the dome is about 10 ft. less, but there is the octagon, the surrounding aisle in two storeys, and adjoining a western porch are two stairs in round turrets as at S. Vitale. There are colonnettes in the arches, though there

are no exedrae, and they even carry a sort of pulvino. The dome, however, is octagonal, not brought out to a circle as at Ravenna. It was probably covered at first with a low pointed roof, when the resemblance between the two churches would have been great externally as well as internally. It is now covered with a huge fluted structure with a grotesque effect. With the plan and the materials, it would seem that Charlemagne must also have imported architects and workmen to realize his scheme, for there could have been no local craftsmen capable of rearing such a building.

The mouldings throughout are in a rather coarse kind of classic style, with sections that betray late Roman workmanship.

Lorsch.

There is a small building at Lorsch which is supposed by some to go back to the time of Charlemagne. It was the gatehouse of the abbey consecrated in the presence of Charlemagne in 774. It is now enclosed as a chapel, but was originally open, with three arches in front and three behind; and it was in two storeys, but the floor has been removed. The upper storey is arcaded with triangular headed panelling, and the pilasters and cornices have the look of late Roman work. Rivoira maintains that it is the funeral chapel of Lewis III., who was buried at Lorsch in 882 in a church which he built called *varia*, which is supposed to refer to the inlay of coloured marbles in chequers with which the walls are decorated. But it is impossible to believe that a building with three open arches, front and back, as they certainly were, for they show both within and without the building, was erected for a church. Lasteyrie thinks it not older than 1090, when there was a fire. But the details certainly have a late Roman look, though they may have been used again in a reconstruction.

Rise of German communes.

Under Charlemagne's feeble successors no buildings are known to have been erected, but under the reign of the three Othos we have the rise of the free communes, and the beginning of civic life and enterprise. Those especially on the great waterway of the Rhine and its tributaries, Cologne, Treves,

Mainz, Worms, Speyer, Nuremberg, Ulm, Regensburg and Augsburg, early aspired to municipal freedom. They resisted bishop, Imperial Vicar, duke and count, and waged incessant war with the castles of the nobility.

It is in these great towns, which succeded in establishing their municipal freedom, that we find the finest examples of early German Romanesque. It was inspired by the Lombard Romanesque and took thence its main characteristics. We meet again the arcaded galleries of the apses of Bergamo and Como, and the tall towers panelled and pierced with windows with mid-wall shafts of Milan and the Lombard plain.

Romanesque from Lombardy.

At Gernrode is a church of 968, partly restored in the twelfth century, almost a solitary instance of a post-Carolingian building till the eleventh century. It has an apse at each end, an early example of a type that became common.

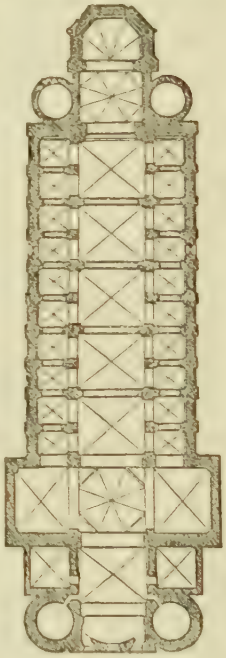
The origin of this German double apse has been variously explained. The second apse does not seem to be an addition, but part of the original plan, of the same date as the other, and two apses are shown on the ground plan for a Benedictine church found in the abbey of S. Gall in Switzerland, dating from 820 and 830, and drawn perhaps by Eginhart himself. The typical plan for these double-apsed churches included a transept at each end of the church, with an octagonal dome on squinch arches over the crossing. This dome is contained in a low tower with an external gallery and a pointed roof. Right and left of this are two flanking towers, rising very much higher. These three towers stand on a line at right angles to the axis of the church, and at Worms are attached to one another. Six towers, therefore, three at each end, are the full complement of one of the great basilicas on the Rhine. The apse is projected at each end beyond the central tower, and is raised on a lofty flight of steps over a crypt. This is the plan of the churches at Worms, Speyer, Laach and Mainz, which, except Laach, which is later, date from

The double apse.

The Rhenish Romanesque.

Worms.

the eleventh century. The towers are panelled with pilaster strips which are connected by arcaded cornices. The naves consist of square bays cross-vaulted, each corresponding to two bays in the aisle, as in S. Ambrogio at Milan. The piers are of plain square masonry, with a vaulting shaft on the face of the main pier, and a pilaster strip on the lesser piers of the aisles, running up, at Worms and Mainz, from the moulding at the springing of the aisle arches. At Mainz there are arches as if for a triforium but they are not pierced.



From Fergusson.

FIG. 46.—Plan of Worms Cathedral.

At Speyer is a fine crypt, with cushion capitals on the shafts, and there is another at Mainz.

Laach is smaller and later than the others, dating from 1156. It has the full complement of two apses, six towers and two transepts. The flanking towers here stand away from the dome tower. The pilaster strips carry wide arches on the round towers, which have the effect of undercutting the top of the tower, making it overhang and be top-heavy, with a very bad effect. At Laach the western apse projects into a charming little cloister which has arches on coupled and tapered colonnettes.

Laach.

Later Romanesque churches have square fronts with a pair of towers as at S. Castor at Coblenz, and at Andernach, which has four towers, of which the two western are roofed in a way peculiar to Germany.[1] It consists in gabling the tower on four faces, roofing on an inclined plane the triangle between them and doubling it upwards. The double pointed lozenge

Coblenz and Andernach.

[1] At the village church of Sompting in Sussex is a tower roofed in this way, unique in England.

LAACH CATHEDRAL.

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ANDERNACH.

To face page 205.

thus formed is one side of a square pyramid or spire placed diagonally on the tower, of which the angles run down to the points of the gables which intercept them.

The Romanesque churches of Cologne have no western apse. Three of them have apsidal transepts. S. Maria in Capitolio has an ambulatory round all three apses of choir and transepts which, though it has a fine effect inside, make the east end outside clumsy and heavy. Over the crossing is a dome, which is only imperfectly circular, with small pendentives in the corners of the square. This church was rebuilt in 1047.

Cologne Romanesque.

At Great S. Martin the triple apses have no aisles. A manifest improvement on S. Maria. The outside of this church with its central tower is fine, and shows well from the river.

Round the apses of these churches appears the arcaded gallery of the Lombard buildings.

The severity of these Romanesque buildings gradually gave way to the introduction of ornament by sculpture round doorways as at Boppard, and in panels at Mainz and other churches on the Rhine. But Romanesque feeling governed German design well into the thirteenth century.

There was a transitional style in German art, though Lübke says it is transitional in date rather than in principle. But both Fergusson and Freeman regard it as having the seed of a further developed round-arched architecture, and lament its abandonment for the foreign style of Gothic.

The transition.

Lübke credits the decagonal nave of S. Gereon at Cologne with being the first Gothic building in Germany. But in this noble building the Romanesque element still prevails. There are round arches in the lower storey, though above in the clerestory are windows which may almost be said to have plate-tracery. There is also a colonnaded gallery outside which, though it shows a leaning towards Gothic, is yet a Romanesque feature. The date seems to be from 1212 to 1227. If it be compared with the contemporary work in England and France or with the work of S. Hugh at Lincoln at the end of the twelfth century, from which all

S. Gereon, Cologne.

trace of Romanesque art had vanished, the difference will be manifest.

The German Romanesque.

Although German Romanesque was derived from the Lombard style of North Italy, the Germans, having borrowed it from their neighbours, succeeded in making it their own, and giving it a national character. The fine churches we have hitherto described have originality and distinction that seemed to promise further development on the same national lines. This is felt perhaps more strongly in the northern churches, as, for instance, at Hildesheim where the fine churches of S. Michael and S. Godehard, which date from the late eleventh and the twelfth century, are more highly finished than the churches on the Rhine, though inferior to them in scale and exterior magnificence. There is more carving on the capitals, though they still preserve the cushion type, and more variety in the nave arcades, which are divided by piers between groups of arches on columns.

Strasburg.

In the eastern part of Strasburg Cathedral, which seems to have been rebuilt early in the thirteenth century, German Romanesque appears in its final stage. There is the familiar tower over the crossing of an eastern transept, enclosing a dome on squinches as at Worms or Mainz, and there are the two lateral round turrets ; but all the arches are pointed and the towers are almost reduced to pinnacles. There are evident signs of a coming change, but it was not till the thirteenth century was well advanced that German Romanesque finally gave way to the foreign style, imported from France, which resulted in the cathedral of COLOGNE (Fig. 47).

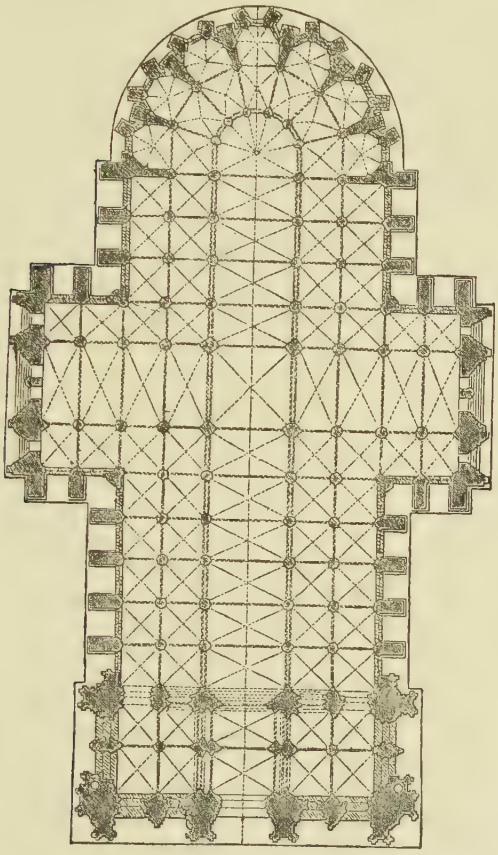
End of German Romanesque.

Cologne Cathedral.

This cathedral, which is supposed to be the highest achievement of German Gothic, seems to have been begun in 1270,[1] and the choir to have been completed in 1322. The design is based on that of Amiens, of which the nave was finished in 1244. It is on an enormous scale, covering an area about one-fourth larger than that of Amiens. According to Fergusson, the

[1] The date often given of 1248 seems to refer to repairs of an older church by Conrad of Hochstetten (Fergusson, vol. ii. p. 269).

choir of Cologne is an exact copy of that at Amiens "not only in general arrangement, but also in dimensions"



From Fergusson.

FIG. 47.—Plan of Cologne Cathedral.

Having adopted French Gothic, it would seem that the architect could not have enough of it. In France, as Viollet-le-Duc observes, the plan of double aisles, two on

each side of the nave, was early abandoned; Notre Dame at Paris had four aisles, but Reims has only two. At Cologne we have all four. The transepts also have aisles on both sides, and they project two bays beyond the double aisles. This great expansion of the church laterally emphasizes what is its great fault, its short proportion. In the interior this is not so much felt, though in walking down the nave one seems to arrive at the transept too soon. But outside, this defect is fatal. The great wide transepts with their side aisles crush the nave up against the enormous mass of the western towers into insignificance. In so short a church it would have been better to have had no transepts at all. In a flank view of the church the transepts seem huddled up against the towers, and the nave goes for nothing. The flèche over the crossing makes it worse, besides being poorly designed. But the whole church is crushed by the immense masses of the two western towers and spires which are said to be as high as the church is long. Seen in direct elevation from the west, with the end of the nave squeezed into a trifling gablet between them, they are seen at their best; seen obliquely from a side view, their enormous bulk throws them out of all proportion with a distressing effect. In most churches the western towers take the width of the single aisle. These take the width of two. But the east end is perhaps as great a failure as any. Surrounded by two aisles of equal height each flying buttress has two piers, as at Beauvais, and two tiers of flying arches, and the arches themselves are very heavy and richly ornamented, and instead of seeming sufficient to support the apse, they seem enough to crush it in. Smothered by this superfluity of buttresses the apse is lost in its supports, and the body of the church is no less smothered by the towers and the transepts, by which it is almost hidden. But the interior of Cologne is beautiful, and with all its faults, for the nave is too high for its span, it goes far to compensate the failure of the outside. Not

Shortness of the proportion.

Excessive size of transept.

Extravagant size of the towers.

The east end.

The interior.

STRASBURG CATHEDRAL.

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the least element in its beauty is the lovely old glass of the windows.

Altenburg.

In the church of Altenburg near Cologne, the adopted style is fully developed. It might have been built by a French architect. It is a Cistercian church, and according to Fergusson is closely copied from Pontigny. I have not seen it myself.

Strasburg. The nave.

The Cathedral of STRASBURG (Plate LI.) has a late Romanesque east end, which has been already described. To this was added a Gothic nave, which seems to have been finished in 1275, in a style a little earlier than that of Cologne. It is well designed, with a large traceried four-light clerestory, of which the mullions are continued down into a triforium with good tracery, which is glazed. The vaulting is quadripartite. The whole is in a fairly good late French geometrical Gothic style.

The façade.

The façade is attributed to Erwin von Steinbach, who is said to have begun it in 1277. His son, after his death, continued it up to the platform in 1365. This front is afflicted with the same megalomania which dictated the proportions of Cologne, and in fact runs through all German architecture. It is nearly twice as high as the nave behind it, which it hides and crushes, and is prepared for two towers, which, however, are better spaced than those at Cologne, the nave at Strasburg being 6 ft. wider than that at Cologne, so that it is not crushed in the same way between the towers, and the towers are only of a moderate size. Only one tower is continued above the platform with an octagonal tower and a spire of open tracery, which was finished in 1439. It rises to the height of 468 ft.

The spire.

Extravagance of German Gothic.

After the final adoption of Gothic architecture from France the style began to take a national character in Germany. It does not stand very high in point of art, trusting rather to daring feats of execution than to high artistic conception; but it is interesting because it has a character of its own. Having grasped the principle of diminishing the area of supports, and increasing that of the voids, and of con-

struction by equilibrium of counter-thrust, the Germans pushed it to the very extreme of apparent, and even of real security. The choir added at Aix-la-Chapelle (1353–1413) is a mere lantern of stone; it has enormous windows with slender mullions, divided by buttress-piers so narrow that from the inside they seem like larger mullions. This support is so slight that the vault has had to be braced with iron ties. I do not know the height of these windows, which are said to be the loftiest in Germany; but those of S. Sebald at Nuremberg are 50 ft. high, with mullions 40 ft. in length. Many of them have bent under their load, and but for their iron saddle-bars would fail to hold the glass and resist the wind.

Aix-la-Chapelle.

Attenuation of mullion.

Attention to mouldings and architectural details fell into neglect. The simplest and most contemptible sections sufficed. At S. Lorenz in Nuremberg they are somewhat better. The capitals are mostly plain elongated bells, with a shabby, thin abacus, like a band. But in the choirs of both these Nuremberg churches the capital disappears entirely, and the arch moulding dies into and springs from the shaft, as in some of the later French churches above alluded to, though here it is not managed so well. There was little change or progress. The choir of S. Sebald was finished in 1377, that of S. Lorenz nearly a century later, but there is little difference between them. The art could go no farther. It was impossible to make taller windows, slenderer piers, or more reedy mullions, and the art went on much the same to the middle of the fifteenth century.

Poverty of detail.

Then the rigid tracery broke, as in France, into Flamboyant lines, and began to run riot in the most unconstructional forms. The mullions wreathed themselves into serpentine curves. In a side chapel at Aix-la-Chapelle the tracery of one window actually takes the form of an Imperial Eagle.

Flamboyant style.

Lübke gives 1525 as the end of this third and last period of German Gothic. The castle at Heidelberg, where the art of the Renaissance appears, dates from 1556.

End of German Gothic.

Two features of German churches remain to be noticed. One is the type called the Hall-church, consisting of three or more aisles of equal height. The old divisions into three storeys of arcade, triforium and clerestory, of course, disappear—for there can be neither clerestory nor triforium, and all the light comes from great windows in the outer aisle, of the full height of the interior. The columns all rise to the same height, and the vaults are all at one level, the arches from pier to pier being merely like stronger vaulting ribs. The two churches I have mentioned at Nuremberg, and the Dom at Frankfort, are examples of the Hall-church—also S. Columba at Cologne, with four equal aisles in a Flamboyant style ; and the system is worked out in a simple way in the Liebfrauenkirch at Nuremberg, which is so short that its three aisles make a square, with a projected chancel, and a splendid porch thrown out in front.

The Hall-church.

All these churches are covered with a single span roof, which consequently rises to an enormous height.

Their high roofs.

Another special feature in some German churches is the development of the triforium into a gallery, by making the outer aisle in two storeys, with equal arches, and vaulting both storeys. The gallery has a parapet in front of pierced stonework.

Galleries.

Western galleries also are not uncommon. There is a fine one at S. Lorenz, Nuremberg.

In these churches the ornament is economized in a manner that puts Cologne to shame, where every available piece of wall is covered with architectural ornament. At Nuremberg there is plenty of plain wall to give the ornament relief. Both these churches are extremely impressive and beautiful. Both are Lutheran, and the Lutherans have kept untouched all the old altars and altar-pieces ; the Lutheran use even allows the old rood to remain on its beam at S. Lorenz, and both churches are more full of their old mediaeval furniture than any Roman Catholic church I have ever seen.

Economy of ornament.

At S. Sebald's is the great shrine of the saint under

Peter Vischer's famous canopy of bronze, which is full of beautiful detail, some of it, however, wasted by being on the ground level, so that to see many of Peter's little figures you have to lie down, or go on hands and knees.

S. Sebald's shrine.

S. Lorenz is famous for the sacrament-house of Adam Krafft, a structure of pinnacle-work that goes up to the roof of the church.

In the north of Germany, which is mostly a great sandy plain, with no stone available, a brick architecture was developed of considerable interest. There are fine examples of it at Lübeck.

Brick architecture.

German architecture assumes a more genial air as one goes southward, in the valleys leading down into Italy; at Trent and Botzen it has a softer character. Nowhere is this more marked than in the great church of S. Stephen, the cathedral of Vienna, which is almost a Hall-church, with three nearly equal naves, lit by enormous two-light windows in the outer aisle. The whole is covered by one stupendous mountain of roof, which is partly disguised by the gabled exterior aisles, and by the great steeple that rises unbroken from the ground in one cone, covered with rich tracery to the height of 441 feet. The interior of this beautiful church has a sympathetic charm about it which it is difficult to explain, but which does not fail to make itself felt.

South German architecture.

S. Stephen's, Vienna.

The Renaissance in Germany produced some fine civic buildings and interesting domestic architecture, which is engaging, with its gablets and pinnacles and dormers. But the megalomania and extravagance that marked German architecture in the period we have been describing, pursued it through that of the Renaissance. The castle of Heidelberg is smothered in ornament to excess. The same extravagance shows itself in the façades of the Renaissance churches, on which every kind of ornament is heaped, without any regard for propriety or decency. The façade of a great church at Bückeburg shows this fashion in its extreme; as a specimen of coarse vulgarity nothing could be worse.

German Renaissance.

ZIERIKZEE

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CHAPTER XXV

THE NETHERLANDS

THE architecture of Belgium and Holland, the Low Countries, forms a distinct chapter in the history of the art. The great churches of the Netherlands rival in size and splendour those of France, though they do not attain the same perfection of style and the same certainty in design; but in civic and domestic architecture the country has no rival, except in the Great Mistress of the Adriatic, on the lagoons of the Brenta.

With little disturbance from without, the cities of these countries grew into great trading communities, independent of one another, like the communes of Italy, or those of the Rhine and Central Germany. The cities of Bruges, Ghent, Antwerp, Malines, Brussels and others became powerful, self-governing bodies, that could defy interference from feudal powers, and could exact charters and privileges. In the north the cities of Dort, Haarlem, Delft, Leyden, Gouda and Amsterdam had the right of sending their deputies regularly to the provincial estates of Holland. It was not till the absorption of the Netherlands by Burgundy in the fifteenth century that the curtailment of their municipal rights began, which ended in the Spanish tyranny.

Of the older churches in the Netherlands the only remarkable survivor is the cathedral of Tournay. The rest, according to Fergusson, were pulled down and rebuilt with greater splendour, as the cities became great and prosperous.

TOURNAY, with its Romanesque nave and transepts, its five towers, and its later choir, a very lantern of glazed

stonework, is one of the most striking buildings in Europe.

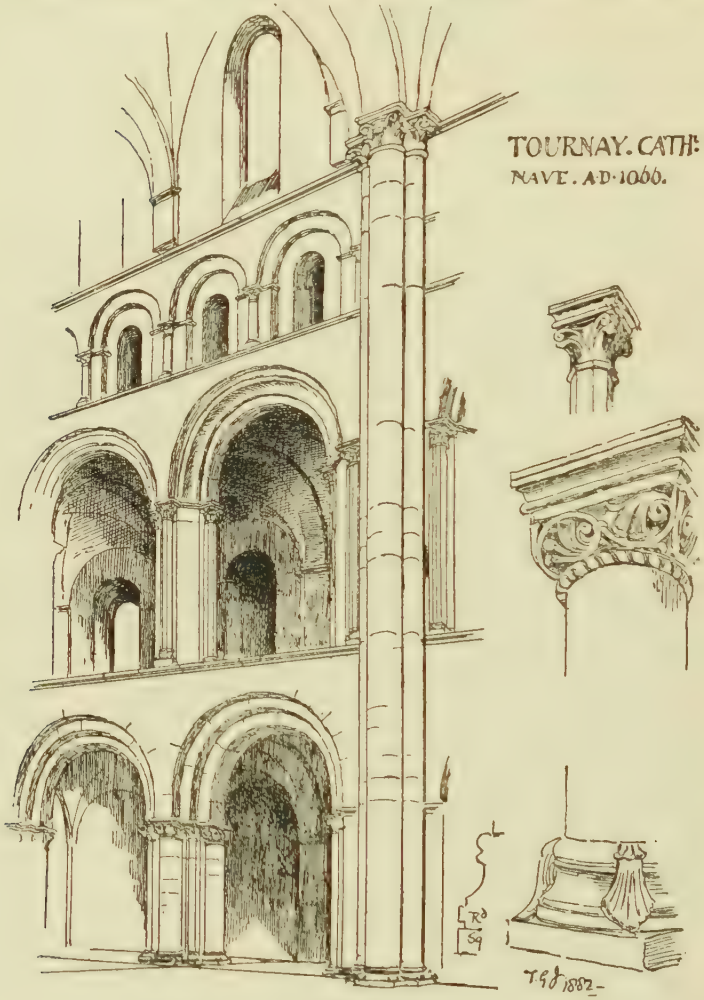

Fig. 48.

The transepts are apsidal, and so have an affinity with

BRICK HOUSE, BRUGES.

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some Romanesque churches at Cologne. But the nave is more like the Norman Romanesque, with a large triforium, actually, I think, larger than the arcade; it is vaulted, and so requires the upper triforium of Noyon, which opens to the nave with little round-headed arches. It is said that the nave was dedicated in 1066, but the work hardly seems so old. The capitals are carved with interlacing foliage and with animals.

The apsidal transepts are later, and were built about 1146. They have an ambulatory parted off by cylindrical columns, 2 ft. 11 ins. in diameter, carrying round arches of two orders. The semi-dome is supported on ribs converging from the piers between the windows. These transepts are as fine as anything in Romanesque architecture.

Of the Gothic period there is the cathedral of S. Gudule at Brussels, and that of Malines; and there was the cathedral of Ypres, now no longer existing, a victim to German destructiveness. The vast cathedral of Antwerp, with its seven naves, has a tower at the west front, of the greatest loveliness, unrivalled by any other of the kind, which is seen in full height from the ground, rising with a graceful outline that could not be amended. Its height is 406 ft., and it was begun in 1422 and finished in 1518.

The churches in Holland are on a grand scale. The great church of Bois-le-Duc or Hertogenbosch has lost its fine rood-loft of marble, which is now in the Museum at South Kensington. But most of the churches, like other buildings in Holland, are of brick, the local material, which is used very judiciously, and gives a character to the district. There are fine churches at Amsterdam and Dordrecht, at Haarlem, Leyden, Delft, Zierikzee (Plate LII.), and in all the great towns. Their interiors have a certain charm with their neatness, their grand organ-cases, the purity of their whitewash, their beautiful screens of iron and brass with painted panels, and their fine monuments. Among these may be mentioned particularly that of the Count of Nassau at Breda, who lies on a base of black marble or touchstone, under a slab of the same on which

Fig. 49.—Antwerp Tower.

his armour is displayed, which is carried at the four corners by kneeling figures of Philip of Macedon, Hannibal, Julius Caesar and Regulus. This monument perhaps gave the idea for that of Sir Francis Vere in Westminster Abbey with its canopy and armour, carried by four kneeling knights.

But the great glory of the Netherlands is the civic architecture; the town-halls, the trade-halls and the halls of the separate guilds of merchants, and in buildings of this class no country is so rich. Bruges, now a sleepy decayed town, was, till ruined by the discovery of the route to the East round the Cape of Good Hope, the busiest mart in North Europe, the principal seat of the export trade of the Low Countries and of the great woollen trade with England. It is full of fine public buildings and of imposing houses built by wealthy burghers in bygone days. No building is better known than the great Cloth Hall, whose tower dominates the town, and is seen far and wide over the flat country outside. It rises square above the quadrangular court, then breaks into an octagon, which audaciously swells above with an overhanging top stage. Not content with this, it once had a spire of 60 ft. more, which was removed in 1741. From this belfry high overhead pour forth melodious chimes of a hundred bells, seldom silent, with harmonies that come and go on the breeze, now swelling into chorus, now sinking almost to a whisper, a strange music from the skies that entrances the imagination and has about it something almost unearthly.

And of Ypres, what can we say? where a few shattered walls are all that German cannon have left of what ten years ago was the finest municipal building in Europe. The Cloth Hall of Ypres was a building all of one date, in pure thirteenth-century Gothic. It had a front of 440 ft. in length, in three storeys, lit by windows all alike, which were returned along the sides of the building. There was no break in the line, but in the middle of the front was a stately tower, and at each end a lofty pinnacle. It was admirably planned for its purpose, which, of course, was that of exhibiting the

From Fergusson.

Fig. 50.—Ypres: Cloth Hall.

manufactures. It is described thus: "It is internally

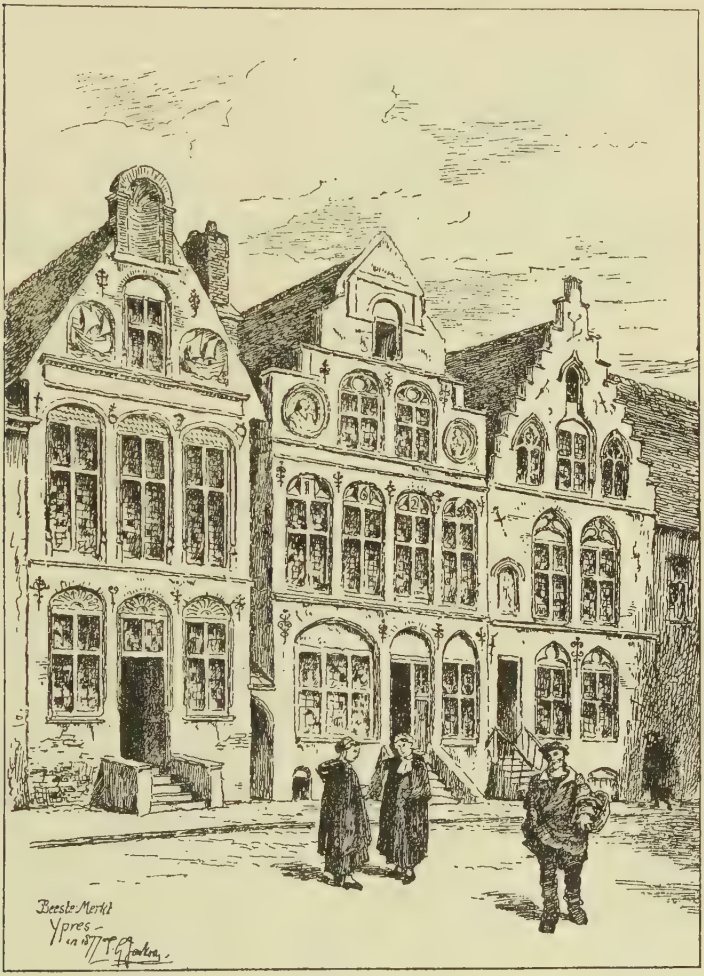

FIG. 51.

a continuous room or gallery, some 30 or 40 feet wide,

and (measuring along its several ranges) about 600 or 700 feet long ; its entire sides occupied by continuous and uniform ranges of windows, and the exterior unbroken to express the unity of the interior ; and its lower storey subdivided into rooms of a small size for various uses ; and with all this unbroken uniformity it would be hard to find a more wonderfully striking building ".[1]

If Ypres fell before the exigencies of war, what can be said for the wanton destruction of the beautiful town-hall of LOUVAIN—an act of sheer German brutality with no military excuse ? It was perhaps the richest in exterior decoration of all the buildings of its kind.

The town-hall of Brussels is the most pretentious of its class, and has an ambitious tower, with an octagonal upper part rising from a square between four detached pinnacles, which are connected to it by flying buttresses. But the junction is not happy.

There are other town-halls at Oudenarde, Bruges, and at Ghent and Malines, but the latter are not finished.

I have already mentioned the charming little Hôtel de ville at S. Quentin, which is now a French town, but once belonged to Flanders.[2]

[1] Gilbert Scott, *Mediaeval Architecture*, vol. i. p. 262.
[2] *Vide supra*, p. 199.

BRUSSELS TOWN HALL.

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CHAPTER XXVI

ITALIAN GOTHIC

We left Italian architecture at the moment when the free communes were beginning to follow the new style which had already established itself in France, and when the pointed arch began to take its place in design at Como, at Genoa and elsewhere, generally beside the round arch, of which the use continued, in fact, all through the Gothic period. For the Classic round arch still had its hold on Italian affection; and Romanesque tradition shows itself in the tower of S. Gottardo at Milan, though it is coeval with the Perpendicular cloister at Gloucester, and half a century later than the Gothic cathedrals of Siena and Orvieto. The cathedral of Lucca, of which the nave is purely Gothic, ends with an apse which is practically Romanesque, though it bears the date 1320.

Tenacity of Romanesque.

It is the fashion of writers on architecture to say that there is no real Gothic art in Italy. Nothing can be less true. If these critics look for the Gothic of France and England in Italy they will of course be disappointed. It is the genius of Gothic to adapt itself to circumstances, and to represent the people and place where we find it; and this it has done in Italy. Salisbury Cathedral on the Arno would be as ridiculous as Giotto's Campanile in Cheapside. The difference between the Gothic of Italy and that of England and France exactly expresses the difference between the people, and the different conditions of climate, national habit, local material and popular tradition.

Italian Gothic.

Its difference.

Italy had a Gothic art which she pursued as ardently as we did ours in the north, and which she believed in as fervently. The Italians of the thirteenth century had long forgotten the old Classic art. The buildings of their ancient forefathers were only regarded as useful quarries of old material, or as food for the lime-kilns. When in the last years of the thirteenth century the Signoria of Florence commissioned Arnolfo to build them their new cathedral of S. Maria del Fiore in such a manner that there could be nothing more beautiful, and that human wit could conceive nothing finer, they had no doubt of the sufficiency of their current Gothic art for the purpose.

Among the differences that distinguish Italian from northern Gothic it should be noted that it is a more civic art, and more secular. In the constant rivalry of commune and commune, each strove to surpass the others in the splendour of its city. The spoils of war, as at Pisa, were spent on increasing the beauty of the Duomo: the four horses from the Hippodrome at Constantinople were placed by the Venetians on the Portico of S. Mark's; the Ducal palace at Venice, the Broletti, town or market halls of Como, Brescia, Cremona, Udine, the public palaces at Florence and Siena, buildings that have no parallel but in the great trading cities of the Netherlands or the Empire, all speak of the civic ardour and patriotism which strove to make each city nobler and finer than its neighbours. The great Church itself was but an element in this competition. In the church architecture of Italy there is none of the mystery of the north; there are no dim perspectives as at Winchester or Lincoln, Chartres or Canterbury; no shadowy portals as at Amiens or Paris. Everything is open and bright, except only the lower church at Assisi, and that they say was built by a German. The Church itself had for the Italian none of the terror it inspired abroad: he was in a manner behind the scenes, and knew too much, and Popes at whose nod nations trembled beyond the Alps were not always masters in their own city, and were some-

A more secular style.

times expelled from Rome with contumely and driven into exile.

In Italian Gothic, therefore, the greater part played by secular architecture, both civic and domestic, is a characteristic which should especially be noted.

Another characteristic which affected the style is the local material. It is above all a marble style. It is true that in North Italy, where stone is scarce, the buildings are of brick, and that the dressings are often of terra-cotta, which is only a glorified brick, and which was used with great judgment and excellent effect: but even in these buildings marble was used for the more delicate features, and many of them were designed for a marble facing which has not always come to pass. But with this exception marble is the material of all important works, and its use affected the character of the architecture. It disposed at once of the deep undercut mouldings of northern Gothic, which are only suitable to a softer stone. It also demanded a different kind of treatment. In designing for stone you think only of light and shade, not of surface: in designing for marble the beauty of the material comes into the question, and surface becomes important. In the broad surfaces, the shallow quirks and fillets, the smooth contours of classic architecture, you see the expression of the nature of the material. Classic architecture is essentially a marble architecture, and the same treatment had to be followed in the Gothic style when marble was used. For this material the Gothic architects had for a long time an abundant supply in the ruins of ancient buildings, which they rifled without remorse; and for their beautiful pavements of opus Alexandrinum they found no lack of broken columns of porphyry, and serpentino, and other fragments of precious marbles, which could be sliced up into discs, or plaques, or chipped into triangles and other figures to fit the pattern.

A marble style.

A marble architecture.

Use of old marbles.

One of the earliest Italian churches in the new style is that of S. Andrea at Vercelli, which was built by Cardinal Guala dei Bicchieri on his return from England, where

he had been Papal Legate in 1219. According to one account, he brought with him a Parisian, a priest who was architect of the church, and its first abbot. According to another account, the architect was an Englishman named Brigwithe. There is something in the plan that is English, but the details of the interior are very French, and the nave arcades might pass for French work, with their capitals *à crochet*, and their quasi-attic bases. There is a good central tower, octagonal in two stages, the lower of which is surrounded with a Lombard arcaded gallery, and there are similar galleries round transepts and nave. The church is built of brick.

S. Andrea, Vercelli.

The use of brickwork in North Italy may have helped to preserve the Romanesque tradition ; for it is awkward to construct a pointed arch in brick and easy to make a round one. The difficulty of jointing a pointed arch in brick led to the joints being struck from one centre instead of two, making the back of the arch much steeper than the soffit, and the arch itself much wider as it rose. The bricks in the head, of course, had to be cut very thin, being nearly upright. But the brick architecture of North Italy is a study in itself ; it is so various and ingenious, and is applied to buildings of such very different kinds. It is employed in many orders of bricks, moulded and sometimes decorated, round doors and windows, generally with very slight projection, so that a jamb or arch with four or five orders forms only a very shallow splay after all. The whole is perhaps surrounded by a flat course of moulded brick or terra-cotta ornamented with arabesques, as in the window from Crema shown in Fig. 52. Whole façades are constructed with windows and doors finished in this way. The front of the church of the Carmine at Pavia is constructed and decorated with cut and moulded brickwork, including a fine large rose window with wheel tracery in the centre. Cornices of ornamental brick crown the gable, and run up the sloping sides of the covering of the aisles.

Brickwork.

Brickwork in North Italy.

Pavia has other work of the same kind, and the Ducal

castle there is full of rich work in brick and terra-cotta, dating from the second half of the fourteenth century; and at a later date, during the Renaissance period, the cloisters of the Certosa of Pavia and of S. Lanfranc are full of lovely terra-cotta details set in brickwork. In the streets of Cremona are many houses with ornamental brick, and friezes of terra-cotta subjects prettily modelled with figures. At Crema the front of the cathedral is divided in three by massive half columns of brickwork with cushion capitals worked in brick, and the windows are surrounded with an unusual number of brick rings or orders, of very slight projection, with a very flat effect.

Pavia.

Cremona.

Crema.

Terra-cotta has been used and abused in modern times, and it no doubt lends itself to cheap repetition. But in these Italian examples, though instances occur of patterns being employed in more than one place, as a rule the design is made for the plan and not used again. Gruner remarks that the little terra-cotta squares in the borders of a church at Monza are all modelled separately.

Terra-cotta: use and abuse of.

One of the most remarkable buildings of Italian Gothic is the great church of Assisi. By the rule of S. Francis, his fraternity of the Fratres Minores or Minorite Friars were to obey a rule of absolute poverty. Neither personally nor corporately were they to possess anything. They were to be hedge-preachers, to be limited to one mass a day, and were not even to have a roof of their own over their heads. But human nature was too strong for S. Francis and his ideal brotherhood. Papal bulls relaxed his rules, the community became rich, and S. Francis was hardly cold in his grave before there began to arise above it one of the most sumptuous fanes in Christendom. According to Vasari, the great church at Assisi was begun two years before the death of S. Francis, but after his death the rush of pilgrims was so great that the plans were enlarged and remodelled on a grand scale. Vasari says that for want of good architects in Italy at

Assisi.

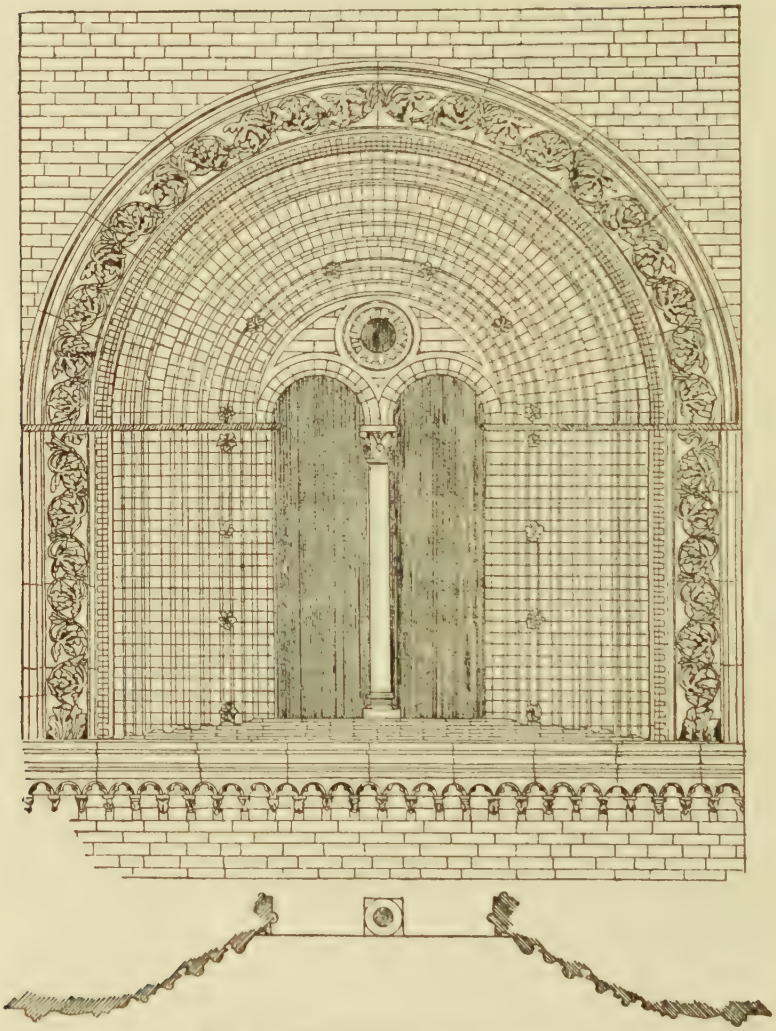

Fig. 52.—Window, Crema Cathedral.

that time, an architect was invited from Germany, whom the Italians called Jacopo d' Alemmania. But it is hard to believe this, for at the time of S. Francis's death in 1226 Gothic architecture had hardly made its appearance in Germany, and the church at Assisi is a well-developed Gothic building. It is said the archives of Assisi contain no mention of Vasari's German architect, whom we may dismiss; and as for lack of architects in Italy at that time, important work was then doing at Como, Vercelli and Lucca, and in 1221 the fine church of Chiaravalle near Milan had been consecrated after a visit from S. Bernard.

The work began by levelling up to form a site on the fall of the hill at the lower end of the town, by an enormous substructure of arches and vaults, as was done by Septimus Severus on the Palatine at Rome. On this stands a double church, a church of two storeys. The lower, which is reached from a small piazza to which an inclined plane leads you from the piazza superiore, the Forum of the old Roman city, is a vast crypt, dark and gloomy, with vaults that spring almost from the ground, and are all painted in fresco. Small windows in chapels beyond the aisles, which are filled with painted glass, admit a scanty light to the mysterious interior. The upper church is light and cheerful with ample traceried windows, and is painted throughout, as every one knows, by Cimabue and Giotto. The great doorway of the lower church consists of two trefoil-headed openings divided in the French way by a pier, and there is a circle with wheel tracery in the head. It is protected outside by a fine portico of Renaissance architecture. Nothing in the whole building points to Northern influence. Nor is the work much like French Gothic; in fact, it is Italian.

The site. The double church.

In the cathedral of SIENA we find Italian Gothic completely developed. It was built in the first half of the thirteenth century, and consecrated in 1267. The west front, by Giovanni Pisano, was finished between 1284 and the end of the century. The plan, regular outside, is complicated inside by the

Siena Cathedral.

irregularity of the transepts, the intrusion of the campanile and the plan of the hexagonal dome. It is on a grand scale, and built entirely of black and white marbles, which are arrayed in bands both within and without the building. The vault is quadripartite; the transverse arches are round, their soffit is flat and panelled, the wall rib is pointed. The columns are clustered and rather slight, and they carry round arches, though those in the choir have a suspicion of a point. But this is so slight as to be doubtful.

The dome.

The hexagonal dome is irregular, the sides being unequal, and tromps gradually reduce it to a circle for the lantern. There is a colonnade below the springing.

The baptistery.

The ground falls so much eastward that there is a lower church at that end on a level with the street beyond. It is the baptistery, and contains the great font, with sculptures by Jacopo della Quercia, Donatello, Ghiberti and Turini—a well-known subject for artists.

The front.

The front, by Giovanni, son of Niccola Pisano, is famous. It is all of white marble, splendidly carved, but the composition is spoiled in great measure by the greater width of the central compartment of the upper storey over-sailing that of the central storey below. One misses the vertical line which should divide the central bay of the nave from the side bays of the aisles, and which should run unbroken through both storeys. This defect does not occur in the companion façade of the neighbouring cathedral of Orvieto.

Scheme of enlargement.

The patriotic fervour of the Senesi had no sooner given them their great marble cathedral than they were seized with a fit of megalomania and decided to double its size. They actually began, and partly built, a vast nave, to which the present church was to have been the transept. But the Black Death came in 1348, and constant wars with their neighbours exhausted their resources, and the scheme was given up. The wall of the intended nave remains almost a ruin.

[*Photo, Anderson.*

ORVIETO FRONT.

[*Photo, Lombardi.*

SIENA FRONT.

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The cathedral of ORVIETO was begun in 1290 and consecrated in 1309. The architect was Lorenzo Maitani, of Siena, who lived to see it completed in 1330. Here we revert to the old basilican plan of a nave and aisles, with colonnades and a wooden roof. On the aisles are set shallow round projections serving as chapels. Towards the east end a transept projects as far as the aisle. The south transept contains the famous paintings by Signorelli and Fra Angelico, with their portraits.

Orvieto Cathedral.

The walls, both within and without, are of black and white stone in bands, marble being reserved for the façade. But marble is used for the two-light traceried windows of the aisles, of which the upper part is glazed, and the lower filled with thin slabs of alabaster, through which the brilliant Italian sunshine passes, making the windows, when seen from a distance, appear to be painted with a picture in brown monochrome.

Alabaster windows.

The front is better than that of Siena, for the three bays are divided by pilasters between nave and aisles, that run up the whole height. The doorways also are better proportioned. The jamb shafts have mosaic, and the pediments have mosaic pictures, one, alas, represented by a bad modern copy: the original is in our Museum at South Kensington.

The front.

On the lower part of the piers dividing the doorways are some very beautiful reliefs of the Resurrection and the Last Judgment. The figures are small and the relief slight, and they are divided by delicate foliage branching from intertwisted stems.

The sculpture.

In nothing is the contrast between the Gothic of the north and that of the south shown better than by the comparison of their great portals. In England the west portal was generally neglected, but in France and Italy it becomes the great feature of the front. Yet nothing can be more different than the way in which they are treated. In Italy they are moderately recessed with jamb shafts, but no figure

French and Italian portals.

sculpture either at the sides or in the head. The northern portal has all these, set back farther under a deeply recessed canopy of sculptured arches. The two kinds are too different to admit of comparison; each will have its preference according to the taste of the observer.

Towards the end of the fourteenth century, behind the inlaid Romanesque front built by Guidetto, as he tells us, in 1204, when "his right hand wrought *tam pulchras columnas*", the men of Lucca built their beautiful Gothic cathedral. The piers are of a type that became common, consisting of flat pilasters grouped round a square pier. There is a fine triforium with delicate tracery, which, together with the arcade, is carried as a screen across the opening of the transept. The round arch is retained both for the arcade and the triforium. But Romanesque forms are here mixed with Gothic, and the new east end, begun in 1308 and continued, after an interruption, in 1320, but for a difference in the sculpture, might have been built in Romanesque times a hundred and fifty years earlier.

Duomo of Lucca.

In Milan Cathedral we are again asked to see a foreign influence on the architecture. It was begun in 1387 by Duke Gian Galeazzo Visconti, who invited architects from Germany. Heinrich Ashler, of Gmunden, Italianized as Henrico di Gamodia, seems to have been the principal architect, but Italians seem also to have been employed, and there was much jealousy between the natives and the foreigners, which retarded the work. As late as 1486, Gian Galeazzo Sforza wrote for the master-mason at Strasburg, to advise him about the central tower, which, however, was vaulted, not by him, but by Omodei and Francisco Giorgio of Siena between 1490 and 1522, in a purely Italian fashion like Chiaravalle and the Certosa of Pavia. It is in fact difficult to trace any foreign influence in any part of the building.

Milan Cathedral.

Milan Cathedral is said to be the third largest in the world, and, being built entirely of white marble, it may claim to be the most splendid. No one can fail to be

[*Photo, Alinari.*

LUCCA CATHEDRAL.

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fascinated by the pinnacles and traceries, and the great central dome and spire gleaming in pure white against an azure sky, in spite of its strange, fantastic conception, while the interior is undoubtedly one of the most solemn and impressive in Christendom.

CHAPTER XXVII

ITALIAN GOTHIC (*continued*)

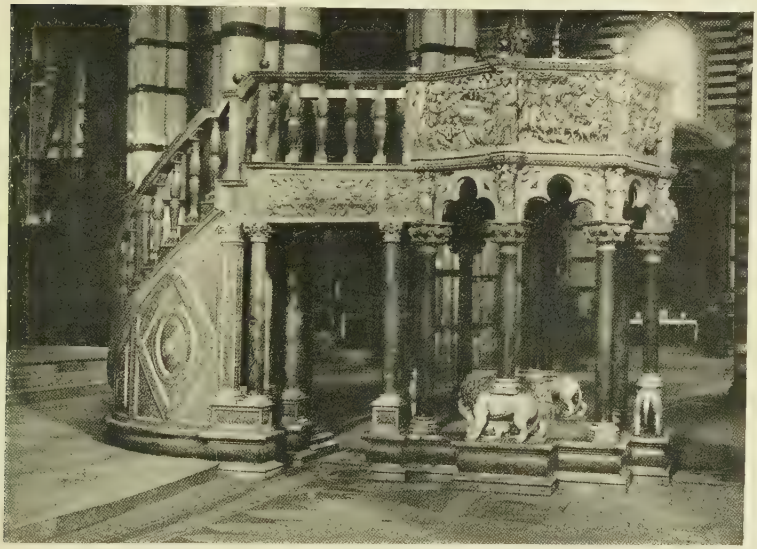
NICCOLA PISANO, who was born in 1205 or 1207, and lived till 1278, architect and sculptor, was the first of the eclectics, who, though they worked in the Gothic style of their day, borrowed ideas from the forgotten art of the ancients. Though the classic inspiration he derived from the antique only affected his sculpture, and had no effect on the architecture of the day, as practised by himself and his school, yet Niccola's work paved the way for Donatello and Brunelleschi, and the Classic Renaissance. He is credited, on doubtful authority, with the design of S. Antonio at Padua, which is a fantastic version in Gothic of S. Mark's at Venice. The church of the Frari, and others in the same style at Venice, are probably by men of his school, and are all Gothic. In 1260, as the inscription it bears tells us, he made the beautiful pulpit in the Baptistery at Pisa. The design is Gothic, worked out with great purity, but Classic influence shows itself in the egg and dart ornament on the capitals, and above all in the sculptured panels of the sides. The figure subjects in these are distinctly based on those of an antique sarcophagus in the Campo Santo. Niccola's figures are rather short and stumpy, but they have the Classic stamp, and something of the Classic grace, and the general composition is evidently studied from the antique.

Niccola Pisano: the eclectic.

Pulpit at Pisa.

This beautiful pulpit is hexagonal, carried on marble pillars that rest on lions or groups of animals combined with human figures. The contour of the mouldings is

LUCCA—ST. MICHELE. [*Photo, Brogi.*



[*Photo, Lombardi.*

SIENA—INTERIOR WITH PULPIT.

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refined and excellent, and reminds one of the attic bases of Amiens and Notre Dame at Paris.

Pulpit at Siena.

Five years later Niccola was engaged on a great pulpit for the Duomo of Siena. This is octagonal, and like that at Pisa, but not, to my taste, equal to it. It has a fine Renaissance staircase added in the fifteenth century (Plate LVII.).

Giovanni Pisano.

The work of Giovanni Pisano inclines less to Classic than that of his father Niccola. In 1278 Giovanni began the Campo Santo at Pisa, to contain the sacred earth, brought from the Holy Land after the final expulsion of the Christians.

Arnolfo.

Arnolfo del Cambio, who was born in 1232, and died about 1300 or 1310, is said by Vasari to have done for architecture what was done for painting by Cimabue. In 1290 he began the great Franciscan Church of S. Croce, the Westminster Abbey of Florence. Like other churches of the Preaching orders it has a vast congregational nave, reduced at the east end to a smaller choir and chapels. It has a wooden roof. In 1298 he received the commission already mentioned, to build in a style that would defy rivalry, the cathedral of S. Maria del Fiore, and he made some considerable progress with the work ; but, as we shall see later, probably very little of what he did remains in the existing building, unless in the exterior of the nave.

S. Croce.

The late Gothic churches.

The Gothic churches of the school of the Pisani and Arnolfo are planned on a very different method from those of the north. The construction is very light. The arches of the main arcade are very wide. The bays of the nave are often nearly square, reducing those of the aisles to oblongs ; and the proportion of the solids to the voids in the ground plan is very small ; at S. Petronio in Bologna only one-twelfth part. Fergusson says this proportion would be more appropriate in a railway station. But though there is not much to admire in the detail of these great open Italian churches, there is about them an air of spaciousness and liberty that is not unattractive. They of course

invite and indeed demand decoration, and as there is no opportunity of architectural or sculptured ornament in such plain structures they call for painting. The great church of S. Anastasia at Verona, one of these spacious churches, is beautifully decorated in this way. In fact, in buildings such as these architecture takes a subordinate place. Provided the main features are well proportioned, the effect of the interior depends on colour rather than on form.

S. Anastasia, Verona.

Arnolfo's walls of the Duomo at Florence are cased with coloured marble, red, white and dark green, arranged in panels, and the windows are surmounted with steep pediments between pinnacled buttresses, and similar decoration is applied to the famous CAMPANILE which stands hard by.

The Duomo, Florence.

GIOTTO'S TOWER was begun in 1334, only two years before his death, so that he could only have seen the lower stages of it; perhaps as high as the sculptured panels of the Creation and the arts and sciences of civilized life, which Ghiberti tells us were designed by Giotto, and some of them carved by his hand. The tower was finished after Giotto's death by his pupil Taddeo Gaddi. It is 269 ft. high, and was to have had a spire of 90 ft. more; but fashion had changed when the time came for building it, and the architects of the day condemned it as "a German affair, and old-fashioned". This tower offends the northern Goth who pronounces it only "painter's architecture". Ruskin, on the other hand, calls the "Shepherd's Tower" "the loveliest of those raised on earth under Christian influence". Let us judge it without prejudice, and we can hardly fail to see it has all the elements of a fine composition. The lower part is solid, as so lofty a building requires, but it is daintily decorated with panelling and sculpture. The internal area is 24 ft. square, and the walls are 10 ft. 3 in. thick. This part occupies two of the five stages into which the tower divides, each of them firmly marked off by a horizontal band and cornice. From this the tower rises with a carefully gradated

Giotto's tower.

Criticism of Giotto's tower.

Its consistent and harmonious design.

[*Photo, Alinari.*

FLORENCE—DUOMO AND TOWER.

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scheme of increasing splendour to the top storey, with its superb three-light pedimented window. A fine cornice on projecting brackets crowns the whole. The entire surface is invested with lovely colour by various marbles, and the dark open lights of the windows give relief and value to the whole. It is difficult indeed to find any fault in a design so thoughtfully studied and so carefully carried out. We need not regret the spire.

Its colour.

The remains of civil and domestic architecture in England and France during the Middle Ages are almost entirely feudal and military: savage fortalices at first, slowly yielding to the demands of more peaceful times for greater refinement and comfort. But in Italy the feudal castle could not exist long side by side with the growing wealth and power of the commune. As early as the twelfth century the citizens sallied forth armed to destroy the castles of the neighbouring nobles. As these nobles held their fiefs of the Empire, the Imperial Vicars sometimes interfered to protect them, and were themselves defeated and slain. The dispossessed noble was compelled to become a citizen and to dwell within the walls, though he retained his lands and possessions outside. This doubtful policy had the effect of introducing into the cities the broils from without. Each noble built himself a palace in the town with a lofty tower whence he could annoy his neighbour. Again, several nobles of the same family would group their palaces together so that they might be enclosed by a common barricade. Each city became filled with these interior fortalices, held by families, like the Capulets and Montagues, at constant war with one another. An old print of Siena in the seventeenth century shows more then twenty-five of these towers. At S. Semignano there still stand thirteen, one of them 175 ft. high. At Bologna are the leaning towers of the Asinelli and the Garisenda, known to lovers of Dante, besides many more. When the factions of Guelf and Ghibelline came into being, the first object of the dominant party was to destroy the towers of the

Early domestic buildings in England and France.

Destruction of castles in Italy.

Intestine feuds of the nobles.

other, and from time to time the citizens of Florence issued ordinances for cutting down the towers to a maximum height of 90 ft. or less. In almost every Italian town traces of these domestic fortress towers may be found. Some of them had very considerable pretensions to architecture, but of that little remains in this class of building.

The public palaces of the great cities were built on a scale of magnificence worthy of the dignity of the commune. In 1298 Arnolfo built the great Palazzo Vecchio at Florence with its overhanging turret, where hangs the bell that denoted the freedom of the city, and summoned the people to council or to arms. The great bell was the tongue of the Italian commune. At its sound the burghers rushed to the piazza, as at Oxford the great bell of S. Mary's brought the scholars to the fray, and that of S. Martin's (Carfax) the towns-folk. The threat of Piero Capponi to ring their bells taught Charles VIII. to respect the Florentine delegates.

Palazzo Vecchio, Florence.

The Palazzo Communale of Siena is especially remarkable, rising predominantly on the chord of the semicircular piazza which rises in front like a theatre. The interior is full of lovely chambers with beautiful fittings and paintings.

Palazzo Communale, Siena.

But the great cities of Italy do not depend for interest entirely on their public buildings. The streets, especially of Siena, are lined with the private dwellings of the mediaeval burgher. The front is plain and flat, with windows simply divided by a colonnette, and arched. There are rings of wrought iron for fastening horses by the archway, which admits to an interior cortile, sometimes in the larger houses surrounded by arcades, or decorated with balconies. Everything bespeaks a stern defensive character, as if each burgher's house was his castle, in a literal as well as a figurative sense.

Private dwellings.

In Venice alone this character disappears. Here there were no internal troubles, no feudal quarrels, no factions of Guelf and Ghibelline, Bianchi e Neri ; so here

PALAZZO PISANI, VENICE.

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there were no frowning towers, no prison-like walls or fortified houses. The close secret government of the State prevented any disturbance from within, and her situation guarded her from any sudden attack from without. Domestic architecture, therefore, at Venice is open, gay and gracious, breathing an air of peace and security.

Venice.

The early domestic buildings at Venice are Byzantine, and palaces in that style still stand by her canals. They have round arches, much stilted, and are veneered with marble slabs. On the walls between the window-heads are panels with ornamental borders, and the favourite Byzantine peacocks. The borders finish with an ogee curve at the head, with a finial which gives them an oriental touch. This feature of the ogee arched head runs through all succeeding domestic work at Venice, and forms a leading characteristic of Venetian architecture.

Byzantine palaces.

Venice has a distinct Gothic of her own, differing from the Gothic of the rest of Italy, as she herself for long stood outside and aloof from Italian politics, looking to the East rather than the West. The Venetian palace is planned specially to suit the peculiar condition of the city. It required access both by sea and by land; and while the main front faced the canal, there was an entrance by land from the campo or street at the back. The front to the water follows more or less one type. On the lower floor a flight of steps rises from the water to the door of the hall. This and the rooms above it in the middle of the house run through the house to the back, and have smaller rooms to the right and left. The large hall on each floor divides the house in two. These central halls are so lofty that sometimes the side rooms have two storeys in the height of the central hall. On the upper floor, the *piano nobile*, a great window with marble tracery is set in a frame that occupies the whole end of the central hall, and this in the larger palaces is repeated in the storey above (Plate LIX.). From the windows both of the great central bays and those in the side spaces project lovely balconies of marble with

balustrades and beautifully sculptured brackets to carry them. All the architectural features are in marble, and the wall spaces which are enclosed in the borders that frame the windows are faced with thin slabs of marble. The main building is of brick, and the wall beyond these marble compartments is plastered.

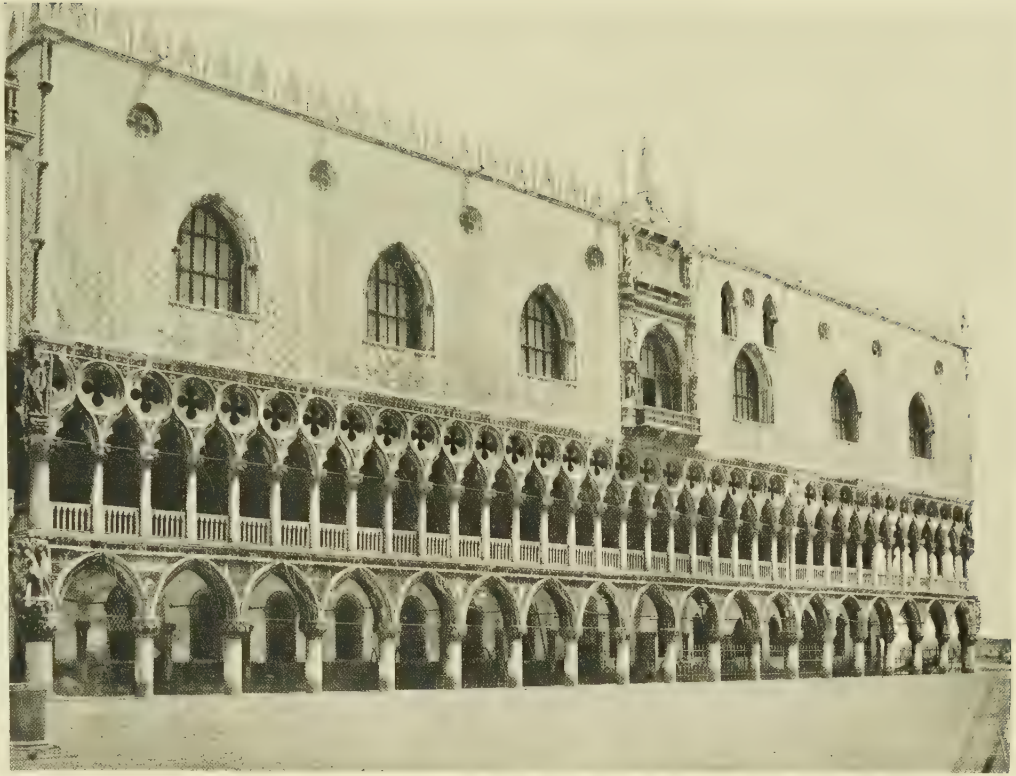
Such is the Venetian palace, conforming more or less to one type, but varying according to the scale and dignity of each example ; it is one of the most beautiful conceptions of Gothic architecture, and it was continued with some variation in the styles that succeeded.

The palace of the Duke or Doge of Venice was begun in the fourteenth century. The front to the sea was built between 1340 and 1404, the architect being Pietro Baseggio. The return front towards the piazzetta (Plate LX.) was continued in 1424 by Giovanni Bon and his son Bartolommeo, who built the Porta della Carta at its north end in 1440–1443.

The building is too well known to need description. It has been praised by some and abused by others, like Giotto's Campanile. The enormous load of the solid upper part resting on the comparatively slight arcades of the two lower storeys naturally provokes criticism. It was gutted by fire in 1577 and the Senate proposed to pull it down and rebuild it elsewhere. Thirteen architects, including Palladio, were consulted, and all but two condemned it. Jacopo Sansovino saved it, pointing out how it had survived earthquakes and salvoes of artillery, and had stood 234 years without harm. Jacopo da Ponte supported him, and they saved the building for us.

At the restoration completed in 1889, however, every capital in the upper arcade was found to be split, and that at the south-east corner below the figures of Adam and Eve was in thirty or forty pieces. The foundation in this part had also given way.

This has been repaired : broken capitals that were past mending are replaced by copies ; the iron sockets to which the ties were screwed are replaced by others in bronze, which are let into the arch instead of into the



DUCAL PALACE, VENICE.

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DUCAL PALACE, VENICE.

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capital. It is to be hoped that the building is now safe.

In the sculpture of the capitals we are introduced to a new style. It is quite different from any elsewhere than at Venice, where the same design was adopted everywhere. The foliage is broad and soft in treatment, the ends of the leaves are curled up, and there is no trace of the Classic acanthus. The contour of the capitals is full and solid, and the foliage well planted on the bell. In the upper part of those at the Ducal palace figures are charmingly introduced of ancient sages, Trajan and the widow, and various arts and sciences. This peculiar Venetian foliage appears suddenly in the fourteenth century and runs through all Venetian work. It is not known except in countries that obeyed the standard of S. Mark (Plate LXI.).

One of the most sumptuous palaces in Venice is the Ca d' Oro, or golden house, which was built in 1430 by Giovanni and Bartolommeo Bon for Messer Marino Contarini, on which was lavished all the splendour of which Venetian art was capable; besides the marble work, it was decorated with ultramarine, paint and profuse gilding.

The small palace of the CONTARINI FASARI in the lower part of the Grand Canal is an architectural gem, treated somewhat differently from the usual style.

CHAPTER XXVIII

THE RENAISSANCE

Petrarch—The revival of learning—The Renaissance in Italy.

THE artistic movement we call the RENAISSANCE—that is, the revival or new birth of Roman architecture—had a totally different origin, and came about in a totally different manner, from any of the changes that we have hitherto recorded in the history of architecture. They can all be traced to social causes, and accounted for step by step as they advanced from style to style. There is no break in their continuity: no interruption in the steady growth of the art from its rude beginnings to its final development. Every change came from within; from suggestions which the work itself conveyed to the workman. We have followed the art from the last remains of Roman work, to the Italo-Byzantine style in the West; to Justinian's work in the East, where all traces of Roman influence disappeared: thence to Lombard Romanesque and to Jumièges and Winchester; to Conrad's "glorious choir", and to S. Denis; to French William's work at Canterbury, and to Notre Dame at Paris; to Lincoln, Reims, Amiens and Westminster, to Southwell and Gloucester, to French Flamboyant, and the fan-vaults of Cambridge and Windsor. In all this sequence there is no break; every step taken forward is the logical result of what has gone before; every fresh departure springs naturally out of the existing style. This continuity of art during the Middle Ages cannot be too much insisted on; without it the history of architecture since the fall of the Roman Empire would be a chaotic puzzle.

It is one art in various chapters that connects S. Ambrogio with the Doge's Palace, the Conqueror's churches at Caen with the west front of Rouen, the Norman nave of Peterborough or Norwich with the fairy vault of Henry VII. at Westminster.

With the Renaissance it was different. It did not come from within. It was not like the art we have hitherto been tracing, a spontaneous artistic movement. It did not begin with the artist like the changes from Romanesque to Gothic, or from "Decorated" to Flamboyant. On the contrary, it was imposed on him from without and not at first willingly received. Nothing like it had ever happened before. There was no instance of a people suddenly abandoning an art they were practising in the natural course of things, and substituting another of which the principles were unknown, and which had been laid by and forgotten for eleven or twelve centuries. In the last chapter we left the Italians contentedly working in their Gothic style towards the end of the fifteenth century: in England Gothic had no rival till the time of Henry VIII. in the sixteenth; in France there was no question of any style but Flamboyant till the time of Henry's contemporary, Francis I. In none of these countries at this time was there any sign of discontent with the current Gothic art of the day, or of any disposition to look back to the long-forgotten art of ancient Rome.

The Renaissance began in Italy, as was natural. But it was not at first an artistic movement: it began with a literary movement, the revival of ancient literature, or, to take a larger view, the revival of Learning itself. Of this by common consent PETRARCH was the apostle. He was born in 1304 and lived till 1374. It was his aim, and that of his follower Boccaccio, to substitute for the corrupt Latin of the School-men the purer style of the authors of antiquity. His writings, based on classical models, inspired others. The spark burst into a flame, and a passion for correct scholarship became the fashion. Greek teachers were introduced, and Plato became adored as a saint. Collection of ancient manuscripts

became the rage, and scholars would be drawn to the ends of Europe by the rumour of a codex, till then unknown. There arose a new profession, that of the "Humanist", the cult of *Litterae Humaniores*, which opened the way to secretaryships and embassies and high employment. The scholars turned their arms even against the Church. Nothing was too sacred to escape their attacks, and the passionate cult of antiquity, with the growth of scepticism which pervaded the intellectual classes in whom the Christianity of Popes like Sixtus IV., Alexander VI., Julius II. and Leo X. provoked disgust rather than reverence, turned the fashion towards paganism. Libraries arose at Florence, Venice, Pesaro and Urbino; and every petty princeling strove to be in the front rank of the patrons of learning.

Tuscany, and especially Florence, were the hot-bed on which the seed of the Renaissance fell and was nurtured. Here only in Italy civic freedom lingered, while most of the rest of Italy had fallen under the yoke of tyrants. Nearly all the great literary names of this period are Florentine, and so are those of the great artists of whom we are to speak from the later part of the fourteenth century onwards.

The literary Renaissance ran its course for many years before it had any effect on art. Niccola Pisano has already been mentioned as the first artist who paid any regard to antiquity; but his example had little effect, and architecture remained quite unaffected by any classic influence for more than a hundred years after his death in 1278. The revival of classic studies by Petrarch had no immediate effect on architecture: the reign of Gothic was undisputed during his lifetime, and when Giotto's tower was finished in 1387 Petrarch had been dead thirteen years.

It was not till the end of the fourteenth century that the new movements touched the field of art; but it was inevitable that from the writings of the ancients attention should be transferred to their works. Petrarch had tried in vain to awaken sympathy for the ruins that stood neglected and defaced, and were still in his time subject

to spoliation. He even formed collections of ancient coins; and his example began to be followed by others. It became the fashion for scholars to collect ancient gems and coins and other antiques. Statues were diligently sought for, and were placed in private museums in the houses of the *Litterati*. To these collections artists were invited and welcomed. Among others, Niccolo dei Niccoli had in his house a museum of marbles, vases and gems which he delighted to display to visitors and to discuss with artists, and hither did young Donatello and Filippo Brunelleschi resort to enjoy Niccolo's hospitality and feast their eyes on his treasures.

Museums.

What Petrarch had been to the revival of learning, that Filippo Brunelleschi was to the Renaissance of Roman architecture. He was born in 1377, and lived till 1446. Like most young artists of that day he began his career with an apprenticeship to a goldsmith. He soon surpassed his master, and with his friend Donatello turned his attention to sculpture. The story of their rival crucifixes, when Donatello was obliged to confess himself beaten, is well known. Inspired by what they had seen in the museums at Florence, Brunelleschi with his friend Donatello set off to spend some years in Rome to study the remains there. And when he saw for the first time the majestic ruins of the capital, Vasari tells us he stood entranced, and seemed beside himself, and gave himself up to study, caring neither for eating nor drinking, and thinking of nothing but the architecture of the past. Two great thoughts, we hear, inspired him; one was to restore architecture to the ancient model, and the other to find some way to close with a vault the great central octagon of S. Maria del Fiore, which since Arnolfo's death no one had yet been able to do.

Brunelleschi.

The church of S. Maria had apparently been carried up to a certain height by Arnolfo, but since his death it had stood still for want of money. In 1355, however, a new architect was consulted, Francesco Talenti. Arnolfo's church was pronounced too short, and his octagon in the centre too small; part of

S. Maria del Fiore, Florence.

the church was destroyed and a larger plan adopted. To Talenti apparently we owe the four gigantic bays which compose the nave. The fourth and last vault was closed in 1378, when drink was given to the *maestri* and *manovali*. Talenti seems to have built the octagon up to the starting of the eight "occhi", or round windows in the drum from which the dome springs, and perhaps he finished them. Then arose the question of covering in the octagon, for doing which many impracticable suggestions were made.

Arnolfo's design.

Arnolfo had left a model for doing it, which we may imagine would have been something like that at Chiaravalle. But the great span of the octagon, which had grown to 136 ft., probably made this impossible. The enormous expense of the necessary centring alone deterred the Signoria from attempting it. Brunelleschi meanwhile had been long engaged in devising a scheme. He seems to have been consulted about the drum, and to have been paid a fee for his advice, and now he was invited to explain his plan for vaulting the octagon. "You must build it without centring", said Brunelleschi, at which they all laughed; but he persisted and repeated his advice day by day with greater insistence, till at last, being a small slight man, he was picked up and carried out by the ushers for talking like a fool. He used to say afterwards he was ashamed to appear in the streets lest the people should call after him, "There goes the madman".

Brunelleschi's advice.

However, the madman had his way, and built his dome without centring, apparently by starting supports from the cornice round the springing. The dome was begun on August 7, 1420, when a feast of bread and melons, with a barrel of good red wine, was given to the workmen, which cost the magnificent sum of 3 lire, 9 soldi, and 4 danari. It was finished by Brunelleschi, except the lantern, in 1436, and the lantern, for which he made a model, was completed in 1461, after his death. He died in 1446, aged sixty-nine.

Construction of the dome.

The dome at Florence is exceeded only by that of the Pantheon, for though 2 ft. less than that of S. Peter's

PALAZZO MEDICI-RICCARDI, FLORENCE.

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at Rome when measured directly, being octagonal, it would exceed it if measured obliquely from corner to corner.[1]

The dome.

Nobody can dispute the beauty of Filippo's dome—"Come te non voglio; meglio di te non posso", Michel-Angelo is reported to have said, looking back on it, when starting to build S. Peter's at Rome.

The new style which appeared in Brunelleschi's dome was at once adopted at Florence; Gothic was discovered to be barbarous, and consigned to the limbo to which the literary world had sent Thomas Aquinas and the School-men. The movement, as I have already explained, did not come from the craftsmen, but from the magnates, the great merchant princes who at that time were supreme in Florence. By them the new style was imposed on the building craft, and primarily on the architects.

Adoption of new style.

In 1430 Cosimo dei Medici, who the year before had succeeded to the wealth and influence of his father, Giovanni, commissioned Brunelleschi to design him a *palazzo*, or tower-house, in Florence. The design was so splendid as to alarm Cosimo, whose object it was to pose as a simple burgher. "Envy", he said, "is a plant that must not be watered", and he employed Michellozzo to make a more modest design. The result is the fine MEDICI-RICCARDI palace, a grand beginning to the new style. It is a solemn pile 300 ft. long and 90 ft. high, built in an austere style, of which Florence and Siena have many examples. It stands flush with the street and is three storeys high, finished with a magnificent projecting cornice. The lowest storey is rusticated; the upper storeys are filled with ranges of windows all alike, divided like the windows in the Gothic palaces into two lights by a colonnette.

Palazzo Medici-Riccardi.

The façade of the STROZZI palace, by Benedetto da Majano, is very similar, but the whole façade is rusticated. In both these palaces the grandeur of the effect is due in

[1] The dimensions of the largest domes in the world in English feet are: the Pantheon, 145; S. Peter's, 138; Florence, 136; S. Paul's, London, 108; S. Sophia at Constantinople, 107.

great measure to the unbroken ranges of windows that run the whole length of the front on both upper floors. No details are introduced for decoration; every feature is a real member of the construction and has a meaning.

Palazzo Strozzi.

The Rucellai palace by Alberti introduces a new element into the design, which was the beginning of mischief. It is a three-storey building, with windows arranged as in the preceding palaces; but between each pair of windows is a flat pilaster, which involves an entablature at each floor-level, and prevents so fine a cornice as that of the Riccardi palace. For it has to be proportioned to the pilaster of one storey instead of to the whole front. These pilasters, innocent enough in this instance, are the beginning of the use of the pilaster and afterwards of the column, no longer as features giving real support and really constructive, but as mere ornaments doing nothing, and without any constructive meaning.

Palazzo Rucellai.

Leon Battista Alberti was, like Leonardo, a universal genius, who shone in many fields, not only those of art and letters. In 1450 he was employed by Sigismondo Pandolfo Malatesta to remodel the duomo of Rimini, of which place Sigismondo was lord. Of all the Italian tyrants none has a worse record than Sigismondo. His whole career was one of cruelty, perfidy and intrigue. He had made away with two wives, and was living with a mistress, Isotta, in whose honour the cathedral was in a manner to be dedicated. Yet he was one of the great patrons of art in the fifteenth century, forming collections, founding libraries, and encouraging artists, men of learning, scholars and philosophers, by whom he liked to be surrounded in his life, and to have their tombs about him after his death. Alberti's work is incomplete, for he died while it was in progress. The building is Gothic, but over the Gothic structure he drew a veil of Classic work of great beauty. From a medal struck by Sigismondo, we gather that the scheme included a great dome. The west front is partly finished, and the south side of the nave is faced with a

The duomo of Rimini.

PALAZZO RUCELLAI, FLORENCE.

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[From "The Builder."

RIMINI CATHEDRAL INTERIOR

[From "The Builder."

RIMINI CATHEDRAL—LATERAL VIEW.

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colonnade of piers and arches, built against the old Gothic wall. In the recesses between the new piers are placed the sarcophagi, in which Sigismondo treasured the bones of scholars and philosophers whom he had patronized in his lifetime; among others, there are those of Gemisthos Pletho, which he had transported from the Morea, where Pletho died. Inside the church the Gothic work remains, but the pointed arches have their piers cased with marble panelling containing charming little figures of children or cherubs on a blue ground; the walls between the arches are panelled with delicate pilasters; and the chapels are enclosed with balustrades and screens of carved and pierced white marble.

The tombs of philosophers.

In this work, and the other early buildings of the Renaissance, though forms of Classic architecture are used, mixed quite naturally with those of the older Gothic school, they are employed with the same perfect freedom as the work of the preceding art. At Rimini Alberti uses the two styles together with no scruple or sense of inconsistency. In fact, these early buildings that have been already noticed may be classed as in a free Gothic style, for a style consists not so much in the forms employed as in the way in which they are used.

The freedom of the mixed art.

But this time of liberty and free art was not to last. In an evil hour Poggio Bracciolini discovered in the monastery of S. Gall a manuscript of Vitruvius, *De Architectura*, which at once riveted the attention of all students of the art. As they read the prescriptions for the several orders, with the accurate and minute directions for the proportion of every member, with its height, width and depth in proportionate parts of the module, they felt they had got the key to the whole system of Classic architecture; that they had only to follow the directions in the book and the thing was done; the art would live again as in the past, and all difficulty vanished. Vitruvius became the architects' Bible.

Discovery of Vitruvius.

Vitruvius the architects' Bible.

Endless editions of this book have been published

in various languages. It has been commented on till the comments have smothered the text. Its authority has been accepted as final and indisputable. The effect has been to bring the Art into bondage to formula, to enslave practice to theory, to extinguish originality, and to make architecture into a mechanical pursuit—in fact, instead of the architecture of freedom and imagination, to give us the architecture of the book.

Vitruvius must not be blamed for this. In fact, as I have already pointed out, it is an evil against which he expressly warns the student.[1]

The orders.

Vitruvius describes three orders, Doric, Ionic and Corinthian, to which afterwards were added Tuscan and Composite. Of private houses Vitruvius says little; his prescriptions are for columnar buildings, such as temples, basilicas and forums. We know now from Pompeii that the Roman house was not columnar, and differed as much from the Roman temple as our houses differ from our churches. But as Vitruvius only gives specifications for columnar buildings, the neo-Classic disciple had to carry the columnar style into all his buildings, sacred and domestic, public and private. And so the fashion introduced by Alberti in the Rucellai Palace rapidly spread, and columns with pilasters, which are their shadow, were lavished in profusion by way of decoration on buildings where they were useless and unmeaning.

Columnar architecture.

This mischief did not begin at once. Vitruvius fortunately was not published till 1486. Whether Brunelleschi and Benedetto da Majano had heard of the book or seen a copy of it we cannot tell. It has not affected the Palazzi Riccardi and Strozzi. There, columns are used in the interior cortile to carry arcades and galleries in a true constructional manner (Plate LXV.). There are no idle pilasters or columns plastered on the surface merely to make a Vitruvian show. The whole design is sensible, reasonable, and, in fact, truthful. Brunelleschi's Palazzo Quaratesi in Florence is equally rational and honest, and his Palazzo Pitti is severe and free of ornament. We may

[1] *Vide supra*, p. xiv.

FLORENCE—PALAZZO MEDICI-RICCARDI : COURT.

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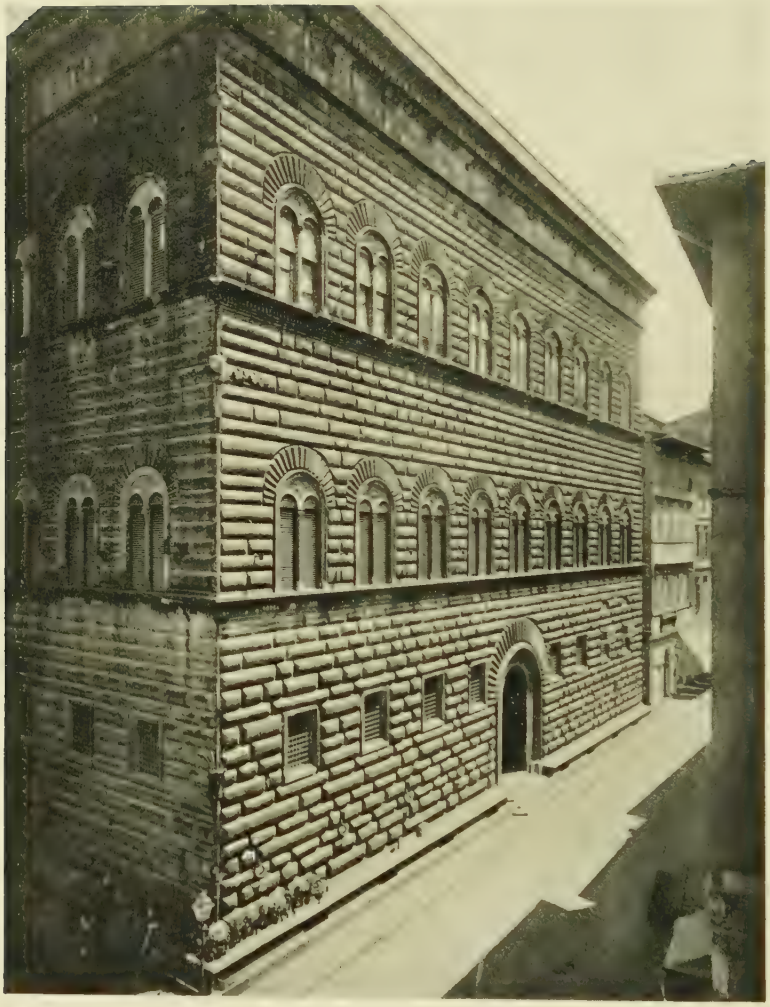

PALAZZO STROZZI, FLORENCE.

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wonder what would have been the course of the Renaissance had it continued on these sensible lines; had that unlucky manuscript perished in the vaults of S. Gallen and not been discovered by Poggio, and had the secret of the module perished with it. We might have had a new chapter of the free imaginative art of the Middle Ages, enriched by the knowledge and incorporation of the form of ancient Rome; for there is nothing in the forms of Classic architecture to prevent their being used with freedom. In fact, there is everything to show that they were so used in the time of the ancients. Vitruvius himself was not a Vitruvian in the sense of the sixteenth century. He gives an account of a basilica he built at Fano, which violates all the principles attributed to him by his worshippers. Viollet-le-Duc wittily remarks that the design would never have been passed by the *École des Beaux Arts*, and the author would have been sent down to the lowest class to learn architecture from Vignola and Palladio. "Not put a complete entablature on the columns! surmount their capitals with wooden lintels, and with timber framing resting on pads! Back the columns with pilasters! What heresy!" [1]

Vitruvius not a Vitruvian. Basilica at Fano.

In fact, during the fifteenth century we find details of Classic form used quite in the Gothic manner in the lovely monuments by Rossellino, Desiderio da Settignano, Francesco di Simone and Civitale at Florence, Bologna and Lucca. They continue the series of monuments by Arnolfo and Giovanni Pisano, but frame them in pilasters enriched with arabesques and carrying a round arch.

Freedom of Early Renaissance.

In his church of S. Spirito at Florence Brunelleschi has placed on the columns of his arcades a square block consisting of a section of the entablature, with architrave frieze and cornice returned round it, in the position of the Byzantine pulvino. This feature occurs in the Baths of Caracalla, but attached to the wall, not standing out on a detached column. It is a piece of pedantry. The order is said to consist of the

The entablature block.

[1] Viollet-le-Duc, *Lectures on Architecture*, Part I. p. 150.

column and the entablature ; and this was a device for completing it, though the entablature is properly a continuous feature running along the wall, or from column to column. This fashion of the entablature block has been much used and abused by modern architects.

Brunelleschi seldom offended by purism. His work is full of life, and it influenced all the art of his successors till the second phase of the Renaissance set in with Michel-Angelo. Alberti, who was Brunelleschi's junior by twenty-eight years and lived till 1472, was less under its influence than others.

The Renaissance, begun at Florence, soon began to spread to other parts of Italy, and Florentine architects were invited by various princes to come and build for them in the new style. Alberti went to Mantua to build the great church of S. Andrea, and Antonio Averulino, known as Filarete, a pupil of Brunelleschi, was invited to Milan, where he built the *Spedale Maggiore* for Francesco Sforza, and his wife Bianca, daughter of the last Visconti Duke. The favourite architect of Cosimo dei Medici was Michellozzo Michellozzi, who, as we have seen, built his palace at Florence. In 1463 we find Michellozzo at Ragusa in Dalmatia, employed in repairing the Rector's Palace, which had suffered from an explosion of gunpowder, and also in building the town walls. The Florentine architects were, in fact, playing the part of missionaries in spreading the new style beyond their own country.

Florentine architects abroad.

Michellozzo.

Duke Federigo di Montefeltro, however, complained that he had "inquired everywhere, and especially in Tuscany, which is the fount of architects, without finding any one truly accomplished in that art", and he employed on his palace at Urbino a Dalmatian, Luciano da Laurana, to whom we owe what is perhaps the most perfect and attractive Renaissance palace in Italy. Bramante was a native of Urbino, and probably studied under Luciano.

Palace at Urbino.

The family of San Gallo gave three architects to Florence. The youngest, Antonio, was employed by Cardinal

THE CERTOSA, PAVIA.

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Farnese, afterwards Pope Paul III., on the Farnese palace, for which Michel-Angelo designed the famous cornice in 1534.

San Gallo.

In Lombardy there was no sudden break with the art of the Middle Ages. The two styles were followed together, and, indeed, during the whole period of the Renaissance the duomo of Milan was being built in the Gothic style. Amadeo was employed upon it, though elsewhere, at Bergamo and at the Certosa of Pavia, he was working in the style of the Renaissance.

Gian Galeazzo, the first Duke of Milan, having deposed and murdered his uncle and father-in-law, Bernabo, a more brutal but less able tyrant than himself, appeased his conscience by founding the most splendid monastery in the world, the *Certosa of Pavia*, in 1396.

The Certosa of Pavia.

The church is in a mixture of styles: Gothic within, Renaissance without. Over the crossing is an octagonal dome-tower, set with receding stages, as at Chiaravalle and Bergamo. But outside the detail is all in the new style, with round arches, terra-cotta enrichments and pinnacles with free Classic details.

The façade was added in 1473 by Ambrogio da Fossano, better known as Borgognone. On this front all the resources of Early Renaissance art are lavished. The design, which would otherwise be rather confused, is bound together by arcaded galleries, the dark openings of which serve usefully to define the stages. The whole is covered with excellent sculpture, and exquisite detail of arabesques, scrolls, candelabra and other ornaments in bewildering profusion, all treated with a liberty more Gothic than Classic — free and joyous, not yet drilled into dull severity.

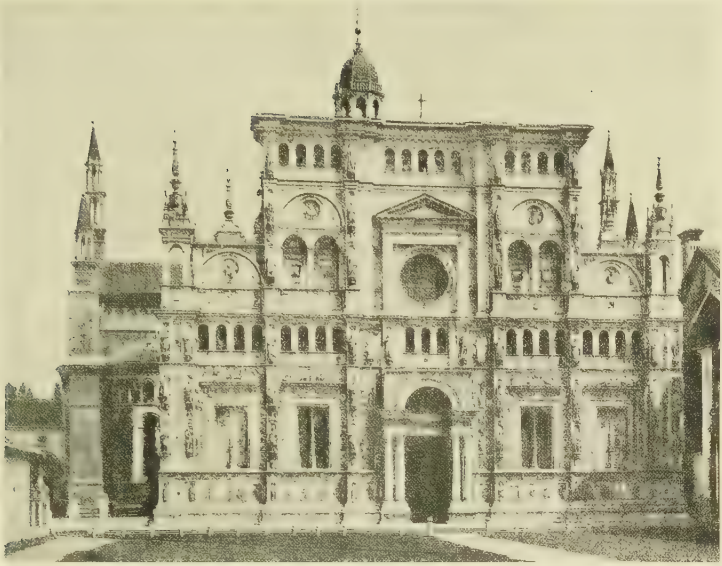
Borgognone.

The interior is as splendid as the exterior. There is a beautiful monument to the founder, which was designed in 1490 but not finished till 1562. The choir stalls are carved, and the backs inlaid with the choicest intarsia work.

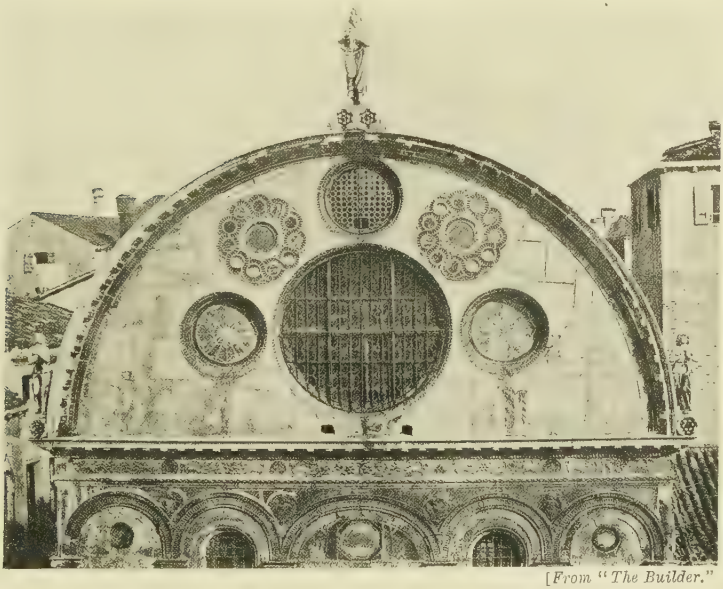
Amadeo or Omodei, the Lombard sculptor, who was employed largely here, and who was also architect of

the duomo of Milan, was born in 1447 and lived till 1522. His work differs much from that of the Florentines, and its sharp crinkled folds resemble the drapery of the early Flemish painters. There are some charming reliefs by him in the Colleoni Chapel at Bergamo, where the great Condottiere is buried, and where Amadeo has made a touching monument of Colleoni's little daughter Medea.

Amadeo.



FAÇADE OF THE CERTOSA, PAVIA.



[*From "The Builder."*

S. MARIA DEI MIRACOLI, VENICE.

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CHAPTER XXIX

THE LATER RENAISSANCE IN ITALY

It was late in the fifteenth century before the Renaissance made any way at Venice. Michellozzo and Alberti were dead; Brunelleschi had been in his grave many years, and the new art had spread to Milan and Lombardy, and in North Italy had superseded that of the Middle Ages, before it reached the city of the lagoons.

Venice.

The earliest Renaissance work at Venice is that of the Lombardi family. Their church of S. Maria dei Miracoli was begun in 1480. It is lined within and without with marble slabs, quite in a Byzantine manner; love of colour predominates, and the walls are inlaid with circles and interlacing borders, like the pavements of opus Alexandrinum (Plate LXIX.). To the same school belongs the beautiful Palazzo Dario on the Grand Canal, which the owner appropriately dedicates VRBIS GENIO, enriched with discs of porphyry and coloured marbles with interlacing borders. The Scuola di S. Marco, built by the Lombardi in 1485, is less successful.

The Lombardi.

Palazzo Dario.

The church of S. Zaccaria has a Renaissance façade by Marco Conducci of Bergamo. The nave finishes with a semicircular gable and the aisles with quadrant ends, though in both cases there are only plain span and lean-to roofs behind. The design of these gables may have been suggested by those of the cathedral of Sebenico in Dalmatia, where the form is given by the semicircular marble roof of the nave and the quadrant vaults of the aisles. But here there is nothing to justify them.

S. Zaccaria.

In a former chapter the design of the front of a Venetian palace in the Gothic period has been explained: the lower floor with a door to the canal approached by a flight of steps; the *piano nobile* above in a central bay with a fine window and marble tracery occupying the whole width of the bay and the great chamber behind; the upper floor like it; the side bays with smaller windows; and the balconies to all windows. In the Renaissance style the same arrangement was continued, though in the later examples the central bay became less and less distinguished from the side bays. At the early Palazzo Cornér-Spinelli it is as distinct as in the Gothic palace, and in the Palazzo Vendramin-Calergi it is still divided off by wider piers, as it is in the Grimani palace, though now confused with the columns and pilasters which the neo-Classic school rejoiced in. In the later palaces, such as the Pesaro by Longhena, the distinction is hardly discernible.

The Venetian palace.

In 1486 the inner court of the Ducal Palace was begun by Bregno or Rizzo, a Veronese. It is a very irregular building, with windows in the upper floors placed where convenience suggested, but the whole drilled into order by bold cornices running the length of the building. The whole is treated with the utmost freedom, and the result is pleasing.

The Ducal Palace.

The Scuola di S. Rocco is one of the most beautiful buildings at Venice in the Renaissance style. It was built by Scarpagnino between 1517 and 1550.

Architecture at Venice passed into a new phase with the arrival of Jacopo Sansovino in 1527. He was a Florentine, who at Rome had associated with men both of the old school and the new: with Perugino, Pinturicchio and Luca Signorelli, and with Bramante, Raffaelle and Michel-Angelo, and had studied architecture with Antonio di San Gallo. Flying from Rome when attacked by the Constable de Bourbon, he came to Venice, whence nothing could ever tempt him to depart, and where he died in 1570. His works there include, among others, the Fabbriche nuove di Rialto, the Palazzo Cornér, the Palazzo Manin on the Grand Canal,

Sansovino.

[*From "The Builder."*

VENICE—THE LIBRARY.

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monuments in several churches, the statues on the Giant's Staircase, the Loggetta at the foot of the great Campanile, the Zecca or Mint, and the splendid Library of S. Mark.

He came to Venice with a great reputation both as a sculptor and an architect. His architecture is marked by a certain freedom and licence unwarranted by the text-books, but more congenial to Venetian taste. His library is a magnificent work in two storeys, Doric below, Ionic above. These are in pure Classic, but the frieze in the upper order is enlarged to admit small windows of an attic storey, quite contrary to anything in Vitruvius. But it is this very irregularity, shocking to the purist, which gives life to the design. The dark spots that break what would otherwise be a long monotonous façade give it brilliancy and interest, and in fact show a touch of genius.

Sansovino. The library.

The Loggetta has been condemned as out of keeping with the enormous plain mass of the brick campanile. But the idea of Sansovino in the sixteenth century building in the manner of the seventh or eighth is only fit for the brain of a pedant. He built it, of course, in the style of his day and in the style he was familiar with, and no true artist would do otherwise.

The Loggetta.

I have already told the story of Sansovino's championship of the Ducal Palace, in opposition to the dozen architects who were for pulling it down after the fire of 1577.

In following the Renaissance at Venice, however, we have been going on too fast, and must retrace our steps to the end of the fifteenth century. With BRAMANTE DI URBINO we reach the end of the Early Renaissance and touch the beginning of the stricter rule of the Vitruvian masters. He was born in 1444 in the village of Fermigliano, where an unpretending farm-house is still shown as his birthplace. He began as a painter, but did not attain much distinction in that branch of art. He came to Milan, where he found employment on the duomo, and turned his attention to architecture. He went to Rome sometime before 1500, and devoted himself to the

Bramante.

study of ancient buildings, where, says Vasari, there were few so ardent and diligent. The palace of the Cancelleria, perhaps the most beautiful of the Roman palaces, has generally been attributed to Bramante, though there is some doubt about it. There is a great grace in the double arcades of the cortile: the Doric capitals are treated with originality, with bands of leaves below the necking, and a circlet of roses above, allusive to the bearings of Cardinal Riario, for whom the palace was built. They appear also in a pretty balcony on the end wall with the Cardinal's hat.

The Cancelleria.

Bramante was employed at S. Maria del Popolo, and by Julius II. to connect the Vatican with the Belvedere by two galleries 400 paces long; but only one was built, and the Pope's furious haste caused the work to be so badly done that a part had to be rebuilt by Paul III.

The Belvedere.

In 1492 he built the eastern part and the dome of S. Maria delle Grazie at Milan, and the doorway at the west end, which was to have been followed by a new façade. But he was called away to Rome for greater things. There he built the well-known circular chapel at S. Pietro in Montorio which Palladio so much admired that he illustrated it in his book, and then it was that he was first consulted by Pope Julius II. about S. Peter's.

S. Pietro in Montorio.

The idea of rebuilding Constantine's basilica of S. Peter was first conceived by Pope Nicolas V. He consulted Rossellino, and also Alberti. Rossellino's design was preferred, and work began at the western end.[1] But the Pope died in 1454 when the new apse was but a few feet above ground, and the work stopped till the time of Julius II. That Pope resolved to carry out the idea of Nicolas V. and build a new church. Bramante was consulted, and his imagination was fired "to dare something beyond anything done before; something that would strike admiration, and even terror, into every beholder".

S. Peter's, Rome.

[1] It must be remembered that S. Peter's, like other primitive churches, has the altar at the west end and the entrance at the east.

ROME—CANCELLERIA.

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S. PETER'S, ROME.

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Bramante made many sketches: a design shown on medals by Caradosso struck for Julius II. and Leo X. has a dome, two western campaniles widely spaced and a portico with a small dome over it. His final plan, however, seems to have been a Greek cross with equal arms. Rossellino's new apse was destroyed and the western part of Constantine's church was pulled down, leaving a great part of the old nave standing outside the new building. The Pope's impatience hurried the work so that scandal was created by the disturbance of old graves, pictures, mosaics, and portraits of eminent men. The destruction provoked Michel-Angelo, then thirty years old, who was in Rome about the Pope's tomb, and he blamed Bramante for throwing down and breaking many beautiful columns that would have served again. The first stone was laid in 1506, and Bramante carried the work up to the level of the cornice that runs above the four great arches on which the drum of the dome rests; and this, according to Vasari, is all that remains of Bramante's work. To him, however, is owing the vast scale of the building, and the gigantic order of the nave, 108 ft. to the top of the cornice from which the great barrel vault springs.

Bramante's design.

Bramante's work at S. Peter's.

Julius died in 1513, and Bramante in the year following. Leo X. entrusted the work to Giuliano da San Gallo, who was too old to act, to Fra Giocondo and to Raffaelle. They altered the plan from a Greek to a Latin cross, but they were all dead in 1520 and did nothing actually to the building. The sad effects of Julius's impatience now began to appear: cracks occurred in the great piers, which were supported by sinking square wells between them filled with stones laid in mortar. Baldassare Peruzzi was consulted, and he went back to Bramante's Greek cross, hoping to save the enormous expense which drove Leo to that traffic in indulgences which was the immediate cause of the Reformation in Germany. Leo died in 1521, and nothing more was done till the reign of Paul III. in 1534, who employed Antonio di San Gallo to make a fresh design. This was partly built before San Gallo's

Peruzzi.

S. Gallo.

death in 1546, and the Pope then called in Michel-Angelo.

Michel-Angelo was now seventy years old, and he undertook the work with reluctance. He disliked S. Gallo's work, and tried to escape, but the Pope insisted, and so he made a model. He returned to Bramante's Greek cross: "Whoever departs from the design of Bramante, as San Gallo has done", he writes to a friend, "departs from the truth". His design was approved by the Pope, and he got to work, pulling down S. Gallo's walls, and following faithfully, as he said, Bramante's ideas.

Michel-Angelo.

He was pestered and thwarted by what he calls the *Setta Sangallesca*, and also troubled by the attempts of the Duke of Florence to get him back to finish his work there. But he was now over eighty years old, and too infirm to travel, and he died in 1564.

His death, 1564.

Cupola unfinished.

Michel-Angelo seems to have built the body of the church on the Greek cross plan, including the drum of the great cupola, leaving a model for the cupola itself. The cupola was built on Michel-Angelo's plan by Jacopo della Porta for Pope Sixtus V. in 1588, and finished, except the lantern, in 1590, and the whole was completed before the death of Pope Clement VIII. in 1605. The church was therefore almost exactly a century in building, and is said to have cost £10,000,000.

The dome.

It is with some surprise that one is reminded that half of the old nave of Constantine's basilica still stood, and was used for services, after the new church had been so far completed. It was pulled down, and the nave prolonged with the present façade by Carlo Maderno between 1607 and 1614. This extension of the nave eastward prevents the full beauty of Michel-Angelo's dome being seen except from a distance or from a side view. Had his plan of the Greek cross been respected, it would have been well seen from the front.

Constantine's nave.

It is, of course, its great dimensions that makes S. Peter's differ from similar Classic churches. And its size does not at first sight impress you. Seen from the

back, the building does not strike you with a sense of vastness. It is a big church, and that is all. The interior certainly surprises you with a sense of spaciousness, but though you are told that Bernini's ugly Baldacchino is higher than any palace in Rome, and that the figures in the spandrils of the great arches, if they stood on their feet, would be 20 ft. high, you only get the feeling of the real size of the building when you happen to notice a human figure. Of course it is the module that effects this. As Vignola says, in architecture you have not to think of feet and inches, but of the module and its parts to which everything is proportioned. Consequently many a Classic church seen through a magnifying glass, without further change, would be S. Peter's, and S. Peter's seen through a diminishing glass would be just an ordinary parish church. It is the column that governs everything and fixes the size of the building; the module is its diameter or semi-diameter at the base, and when you have fixed that, everything else follows according to the Book in the same proportions to the module whatever the size of the building may be.

Size of S. Peter's.

The module.

But the natural module for us by which to proportion buildings is not a variable measurement like the module, it is the man—the human figure—and with that in one's mind, many a Gothic building strikes one with a sense of vastness and sublimity not less impressive, or even more impressive, than that produced by S. Peter's.

Man the natural module.

The great figures of Bramante and Michel-Angelo stand at the threshold of the final stage of Italian Renaissance. From 1523 to 1531 Michel-Angelo was employed by the Medici popes to build the Sagrestia Nuova of S. Lorenzo at Florence, where are enshrined the monuments of Lorenzo, Duke of Urbino, and Giuliano de' Medici, with the figures of Night and Day, Dawn and Twilight. They were never finished, for Michel-Angelo left Florence after helping the vain endeavour to save her liberty, in which he played the part of a military engineer; and nothing would induce

S. Lorenzo, Florence.

him to return. At Rome he designed the buildings on the Capitol, though he did not finish them.

The most remarkable domestic building of this time is the Palazzo di Caprarola by Vignola, built between 1547 and 1559. It is a pentagon with an interior circular court, most ingeniously planned. Vignola also built the Villa of Papa Giulio near Rome, besides other works in his native city of Bologna.

Caprarola.

With Vignola and Palladio we reach the final stage of the Italian Renaissance. They were both authors on architecture, and their writings helped to bind the art more firmly in the fetters of Vitruvianism. Vignola says that with the help of his book, which gives a thorough explanation of the Classic orders, any man of middling intelligence and a little turn for art may master this subject, which has hitherto been found so difficult. Palladio built largely at his native city of Vicenza, and surrounded the great hall of the Palazzo della Ragione with a graceful cloister in two storeys, which is his masterpiece, for it is designed with freedom, and even a certain picturesqueness. His work generally is marked with genius, but it is too coldly correct. The Venetians endured it with reluctance, and early broke away into the Baroco. Palladio's work is entirely columnar, based upon the orders. He says in his book his design was to realize in modern work the lessons derived from antiquity, and as we have no ancient writer on architecture but Vitruvius, to be guided entirely by his precepts. As Fergusson very well puts it, in attempting to adapt the temple architecture of the ancients to the ecclesiastical, the municipal and the domestic architecture of his own time, he was trying to do what no human ingenuity could perform. "That he failed is not to be wondered at; on the contrary, he deserves all praise for the extent to which he did succeed." [1]

Palladio.

[1] Fergusson, vol. i. p. 155.

[*Photo, Alinari.*

PALAZZO DELLA RAGIONE, VICENZA.

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CHAPTER XXX

THE RENAISSANCE IN ENGLAND

The introduction of Roman architecture into England can hardly be called a Renaissance or new birth, for the art had never really lived in our country before. No doubt during the 400 years of Roman occupation the country had been covered with Roman buildings, but the style had never become naturalized, and was only employed for the buildings of the Roman lords of the soil. The Italianization of the country was very superficial, and when the Romans finally departed it soon disappeared. Though, when the Saxons became settled, they aspired to build *more Romanorum*, it came to little more than building in stone instead of with turf and wattle.

No Roman tradition in England.

At the time of the Renaissance in the fifteenth century there was therefore no tradition of Roman art in this country, nor a single building of Roman times to inspire imitation as there was in France, especially in Provence. Here, as in Italy, the new art came not from within, not from the artists as a spontaneous artistic movement, but was imposed from without by the patronage of scholars, the nobility and royalty.

Literary connexion with Italy.

Here, as in Italy also, the literary movement preceded that of art. The influence of Italy on English literature and manners goes back to the fourteenth century. Chaucer was in Italy and met Petrarch in 1373; he borrows four tales of the Canterbury pilgrims from the *Decameron*, and he was evidently a master of the Italian language. The elder Sir Thomas Wyatt and the Earl of Surrey brought back

from Italy blank verse and the sonnet. Translations of the classics began to appear. William Grocyn began to teach Greek at Oxford in 1491, the year before the death of Lorenzo de' Medici, and Erasmus came to study there. In ten of Shakespeare's plays the characters, and generally the scene, are drawn from Italy. It was the fashion for young men of family to visit Italy, and they brought back with them memories of the superior comforts and the more cultured style of living which they found there, and which put them out of conceit with their own rude households.

Intercourse with Italy.

The Tudor house, at the end of the fifteenth century, had advanced considerably in convenience from the rough fortalice of the Middle Ages. Tattershall Castle was perhaps the last of the old feudal strongholds; it was built between 1453 and 1455 by Ralph, Lord Cromwell, but it was no sooner finished than he began to build the manor-house of South Wingfield, a courtyard mansion, unfortified. The older colleges at our universities are early examples of the new style of building. William of Wykeham in 1380, at New College, set the pattern for an academic dwelling, which we follow to this day. The Tudor house which succeeded followed pretty closely Wykeham's plan, with such differences as domestic convenience required. The type was so generally adopted that the manor-house of the sixteenth century was almost standardized. It was built round a court entered through a gateway tower; on the opposite side of the court was the Hall, the centre of the life of the family, with the offices on one side of it, and the withdrawing-room, chapel, and private rooms on the other. Dr. Boorde, the witty physician of Henry VIII., drew up a specification for building a gentleman's manor-house:

The Tudor house.

Dr. Boorde's specification.

"Make the Hall vnder such a fasshyon that the parler be anexed to the heade of the Hall; and the buttrye and pantrye be at the lower end thereof. The Seller vnder the pantrye sette somewhat abase, the kychen sett somewhat a base from the buttrye and pantrye, commyng with an entry by the wall of the buttrye; the pastrie-house and the larder-house

anexed to the kychen. Then devyde the lodgynes by the cyrceute of the quadryngall courte, and let the gate-howse be opposyt or agaynst the hall-dore not dyrectly, but the hall-dore standing a base, and the gate-house in the mydle of the front entrynge into the place: let the pryue chambre be anexed to the chambre of astate, with other chambres

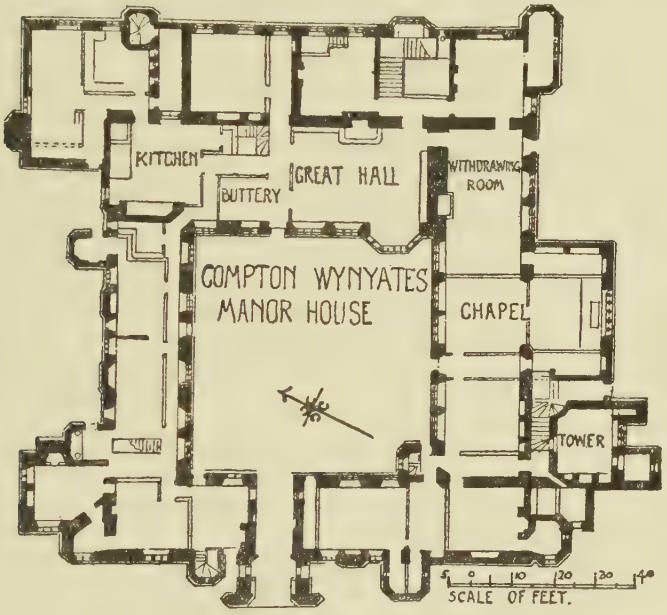

Fig. 53.

necessarye for the buyldynge, so that many of the chambres may have a prospecte in to the chapell."[1]

The beautiful old house of Compton Wynyates is built, with some slight differences, pretty well in conformity with Dr. Boorde's specification (Fig. 53).

The change from the castle to the manor-house marks the change under the Tudors from mediaeval to modern

[1] *A compendyous Regyment or a Dyetary of Helth made in Mountpyllier, compyled by Andrew Boorde, of Physycke Doctour.*

England. The passing of the old feudal castle means the end of feudalism, the decline of the old nobility, and the rise of new families in their places. The new nobility were the creatures of the Crown, subservient to the growing despotism. Most of those who came to the front had been attached to the person of the sovereign; they were enriched and employed, and way was made for the rise of new men like Wolsey and Cromwell, who were dependent on the breath of their master, and could be thrown aside the moment they were not wanted. The spoils of the monasteries which were poured into the lap of these courtiers gave them means to indulge their passion for building, of which the King set the example, with his palaces of Bridewell, Nonsuch, S. James's, and Beaulieu. Wolsey built Hampton Court, and began his colleges at Ipswich and Oxford, besides improving more than one episcopal palace; noble vied with noble in the size and magnificence of their houses; the country gentry began to enlarge or rebuild their manors, and the rich clothiers of the eastern counties built themselves palaces like the nobles.

Passing of feudalism.

The new nobility.

All these buildings were at first in the Gothic style, which resisted the introduction of the new style of architecture more strenuously in England than in any other country; and when at last the Renaissance began to make way, it was by the introduction of Italianizing ornaments, which did not affect the Gothic construction on which they were engrafted. At Layer Marney Hall, built by Lord Marney, one of the new men created by Henry VIII. peers and knights of the Garter, there are parapets with dolphins, and pierced works in terra-cotta in the Italian style, crowning a regular Gothic structure with turrets and mullioned windows. In the church Lord Marney lies under a canopy of Italian terra-cotta on a tomb embellished with terra-cotta devices of heraldry with candelabra and other Classic ornaments. This dates from 1524 and 1525.

Renaissance ornament.

Layer Marney terra-cotta.

Terra-cotta ornament as a Classic style appears also at

Sutton Court, near Guildford, which was built between 1520 and 1530 by Sir Richard Weston, another of Henry's courtiers and servants. Here terra-cotta is used throughout the building as coigns and dressings round the windows and doorways with excellent effect. The modelling is very good, though the little cherubs that frisk over the doorways are rather clumsy; but all the ornament is excellently done. Though executed in terra-cotta, all the details of the doors and windows are in good Perpendicular Gothic, the art of the day, for which the moulds must have been made by English workmen, being in a style quite unknown to Italians. The question then arises whether the ornament was modelled by Italians or by Englishmen who had learned from Italian workmen something of their art.

Sutton Place.

Terra-cotta.

Henry VIII. tried to get Italian artists to this country, and in 1511 PIETRO TORRIGIANO was in England, and the Italians whose work we have at Layer Marney and Sutton may have come with him. The work looks like that of second- or third-rate artists, who might have come as assistants to the principal sculptor.

Italians in England.

Torrigiano was famous for his work in terra-cotta; Michel-Angelo, it is said, was inspired to attempt sculpture by what he saw Torrigiano doing in clay. Torrigiano's effigy in terra-cotta of Dr. Young, formerly in the Rolls Chapel and now in the Record Office, is well known.

Torrigiano.

In 1511, he contracted to make the tomb of Lady Margaret Beaufort, the King's grandmother, in Westminster Abbey. Her splendid figure with the hands withered by old age is worthy of the best Florentine traditions. She lies on a tomb of black touchstone with escutcheons on the sides, within wreaths. In 1512, the King contracts with Master Peter Torrysany for a tomb to his father and mother, King Henry VII. and his Queen Elizabeth, in the new chapel at Westminster Abbey, which was just then finished. The work was to be done "clenely and workmanly for the sum of £1500

Tomb of Lady Margaret Beaufort.

Tomb of Henry VIII.

sterling", and it was finished in January 1518–19. The tomb is of marble, black and white with dressings of brass gilded, including groups of the King's "avouries", in medallions on the sides. The whole is a superb piece of Italian work adapted to the idea of the conventional English tomb.

Hampton Court.

In 1515 Wolsey took on lease from the Knights Hospitallers the site of HAMPTON COURT and straightway began to build. He was now at the summit of his power, wealth and dignity, Archbishop of York, Cardinal and Legate, Chancellor of the Realm, and holding several sees in commendam. George Cavendish, his gentleman-usher and biographer, glories in his master's splendour, his chapel with dean and choristers, the noblemen and gentlemen-in-waiting, the yeomen chosen for stature and comeliness, his cook in velvet and satin with a gold chain, the two tall priests to bear before him his two crosses for the Archbishopric and the "Legacy", the gold and silver plate and the silken furniture. Du Bellay, the French envoy, says every place glittered with vessels of gold and silver; and there were 280 beds for strangers only, all of them furnished with silk. Nothing like it had been seen out of Rome. Wolsey's building at HAMPTON COURT is of a sober red brick, with turrets and mullioned windows in the Gothic of the day. But he employed Italians on the decorations. The entrance turrets have medallions of terra-cotta with busts of Roman emperors by Joannes Maiano, who received £2 : 6s. each for the *rotundae imagines ex terra depictae* for the palace at "Anton Cort". There are also terra-cotta panels of heraldry, with figures, over the gateways. In the interior Wolsey employed Italians, probably either Luca Penni or Toto della Nunziata, to paint his private closet.

The splendour of Wolsey's work provoked the King to ask him why he was building such a palace, and Wolsey in alarm replied, "In order to show how noble a palace a subject may offer to his sovereign". With the house he made over all the plate and contents, but he seems to have continued to use the place till his fall three years later.

HAMPTON COURT—CLOCK TOWER.

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Henry pulled down Wolsey's hall and built a larger one, the present stately structure, which is after Westminster perhaps the finest Gothic hall in the kingdom. In the pendants of the roof Renaissance ornaments occur, but it appears from the accounts that they were made by an Englishman, Richard Rydge of London. The natives were already beginning to catch the new fashion.

The hall by Henry VIII.

The palace of NONSUCH, between Cheam and Ewell in Surrey, which has now entirely vanished, was another of Henry's extravagances. It was unique, the wonder of the age, as Leland writes—

Nonsuch Palace.

> Hanc quia non habeat similem laudare Britanni
> Saepe solent, *nullique parem* cognomine dicunt.

It was given by Charles II. in 1670 to his mistress Barbara Villiers, Duchess of Cleveland, "another lady of pleasure, and curse of our nation", as Evelyn says, who dismantled it to pay her debts. Not a trace of it now remains.

Nonsuch was built round two courts, of which the inner seems to have been of timber framing filled in with plaster panels, modelled with figures of full life-size. On the King's side were the Labours of Hercules, on the Queen's side "all kinds of heathen stories, with naked female figures". Evelyn and Pepys both visited it, and found it in a state of neglect. Evelyn describes the plaster statues and "basso relievos of the inner court inserted 'twixt the timbers and puncheons of the outside walles of the Court which must needs have been the work of some celebrated *Italian*. I much admired", he continues, "how it had lasted so well and intire, since the time of Henry VIII., exposed as they are to the aire, and pitty it is they are not taken out and preserved in some drie place; a gallery would become them."[1]

Torrigiano was commissioned by Henry VIII., in 1518, to make a tomb for him and Queen Katharine, like that

[1] *Diary*, January 1660.

of Henry VII. but "more grettir by the iiijth part". It was to cost £2000. This, however, fell through, and Wolsey then employed Benedetto da Rovezzano to make a tomb for him at Windsor, which was well advanced at the time of his fall, when the King took possession of what was done. In splendour it was to have surpassed the royal monument, but Henry now determined to make it finer still. Had it been completed from Rovezzano's beautiful design there would have been no monument in Europe to compare with it. But the metal work was broken up during the civil wars; the sarcophagus now marks the resting-place of Nelson; the four bronze candelabra, 9 ft. high, now stand in front of the high altar in S. Bavon at Ghent, and are represented by copies in S. Paul's Cathedral in London.

Wolsey's tomb.

This brings us to the end of the period during which Italians were employed in England: but the Italians had sown the seed of Renaissance art in this country, which did not fail to grow, though it had a hard struggle with the native Gothic style. We find the two styles mixed in Lady Salisbury's chantry at Christchurch Priory, Hants, where there are Perpendicular windows, fan-groining and crocketed niches, though the friezes and shafts outside are carved with graceful Italian arabesques. Bishop Fox's chantry at Winchester, and that of Bishop Gardiner have Renaissance details, and there are beautiful fragments of screens with Italian details in the church of the hospital of S. Cross.

Traces of Italian work.

At the death of Henry VIII. the Italians seem to have left England, probably for lack of employment. The short reigns of Edward VI. and Mary I. were disturbed and unquiet, and there was little room for art to flourish in. With Elizabeth's accession and the establishment of the Protestant religion all intercourse with Italy was interrupted, and attention was directed rather to the Low countries and Germany.

Departure of the Italians.

The tyranny of Philip II. and the brutalities of Alva drove many refugees from Belgium and Holland to our

KIRBY.

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shores, who brought with them trades new to this country and workmen of superior skill. Maidstone begged for foreign settlers, Norwich received 1000 Dutchmen; lace-workers were established at Honiton, fishermen at Sandwich: in time the immigration became so great that it had to be controlled and checked.

Flemish and Dutch immigration.

These strangers brought with them traditions of their architecture and other arts, including painting. Holbein came here with an introduction to Sir Thomas More from Erasmus, and here he stayed till his death from the plague in 1543. To him are attributed the gate-houses of old Whitehall Palace with their terra-cotta roundels, which have now disappeared.

In 1566 the Royal Exchange was built by Sir Thomas Gresham from the design of Henry de Pas of Antwerp, and from the Netherlands came the fashion of cut and curved or scrolled gables that so often take the place of the simple English straight-sided ones. These are more frequent in the eastern counties, which were in closer communication with the Netherlands through the wool trade.

Royal Exchange.

Perhaps the most beautiful building of the early English Renaissance is the now ruined house of Kirby in Northamptonshire. It was built in 1572 for Sir Humphrey Stafford, after the fashion of the time round a courtyard, with the principal mansion at the far side from the entrance. In this part is the great Hall, which rises up into the roof, and is lit by great mullioned and transomed windows of the full height of the building. These great windows are continued along the whole front of the block with a magnificent and unrivalled effect. A tower with an ornamented gable divides the front in the middle. Into this a Classic window has been inserted by Inigo Jones, who also remodelled the entrance wing at the opposite end of the courtyard, and spoilt it.

Kirby House.

The side wings are divided into smaller rooms, with staircases like an Oxford college, the doorways of which are designed in a correct Italian style, like that of the

house which his grateful countrymen built and gave to Andrea Doria at Genoa. Other Italian influence appears on the pilasters next the great gateway, which are decorated with arabesques, probably by native carvers working in the new style and on Italian models.

Longleat. LONGLEAT HOUSE was built for Sir John Thynne between 1567 and 1579. Tradition attributes the design to John of Padua, a shadowy person of whom we know nothing but that he had a grant of 2s. a day from Henry VIII. for his services in architecture and music which was renewed by Edward VI. He is further described as "devizer of his Majesty's buildings". There is a tradition that the plans for Longleat were intended for Protector Somerset's house in the Strand; Sir John Thynne had relations with him, and on the Protector's fall, according to the tradition, he used the plans for Longleat. There is certainly more Italian feeling in the design than in most of the houses of the date. Whoever made the design, the work seems to have been carried out by Robert Smytheson, "fremason", who was recommended to Sir John Thynne by Sir Humfrey Lovell. His wages were to be "xvi^{d} a daye, that ys to say viii^{s} a weke and a nage kepte at your worshepes charges".

The new staircase. In the latter half of the sixteenth century, interior access in the house was improved by the substitution of staircases in straight flights for the winding stone staircases which had till then been universal. Their inconvenience became very great as the retinue of the nobles increased and the houses grew to an immense size. Audley End is still a great palace, but it is barely half of its original size, and it was equalled by the great houses of Holdenby and Theobalds. Wollaton House, near Nottingham, was built by Sir Francis Willoughby in 1580 with stone from Ancaster, in exchange for which he gave his coal. Statues for this house were ordered from Italy.

These great palaces were none too large for the establishments of the great nobles. Wolsey's household consisted of 500 persons, of whom Cavendish gives the list. Richard,

LONGLEAT.

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Earl of Dorset, early in the seventeenth century had a household of 200 persons at Knole, of whom a catalogue is preserved with the places of those who sat at the tables in the dining hall. My Lord and Lady with their family and a few intimate inmates, 8 persons in all, sit at the high table. There are 22 at the parlour table, including the chaplain, gentleman-usher, secretary and pages; at the clerk's table, 21 persons, including the cooks, yeomen of the buttery and pantry, the brewer, the slaughterer, gardeners and others; at the nursery table, nurse, carpenter and 3 more; there are 47 servants and grooms at the long table; at the laundry-maids' table, William Lewis the porter and 11 women; at the kitchen and scullery table, 6 men, including John Morockoe, a blackamoor.

Size of the establishments in Tudor times.

There were no tradesmen in those days to serve from outside: every household had to be its own butcher, baker and brewer, and all domestic needs had to be furnished within the establishment.

There is a remarkable group of buildings in the county of Northampton, erected by Sir Thomas Tresham in the latter part of the sixteenth century. Rushton Hall is a fine house of the date but not especially remarkable; but the market house at Rothwell, the triangular Lodge at Rushton and the Lyveden New Building have a distinctive character. Tresham, brought up a Protestant, became an ardent Roman Catholic, and his buildings were intended as a perpetual evidence of his faith. The TRIANGULAR LODGE was built between 1593 and 1595 to express his belief in the Trinity. Three sides are surmounted by three gables each containing three windows which are trefoiled and have triangular piercings. There are three storeys, and a three-sided central pinnacle serves as a chimney. The Tresham arms contain trefoils, the motto is *Tres testimonium dant*, and the inscription consists of 33 letters. The building is prettily banded, a freak of orthodoxy, picturesque but useless.

Sir Thomas Tresham's buildings.

The triangular Lodge.

The LYVEDEN NEW BUILDING expresses Sir Thomas Tresham's Christian faith. It is cruciform with an oriel

at the end of each arm. English taste dictated mullions and transoms in the windows, but everything else is in tolerably pure Classic. The frieze at the first floor has emblems of Christ's passion in the metopes. The building was never finished, nor the market house at ROTHWELL, which is in a similar style. Sir Thomas Tresham was several times imprisoned as a recusant, and two years after his death his son Francis was implicated in the Gunpowder Plot and died in prison.

Lyveden New Building.

Rothwell.

The great house at BURGHLEY, near Stamford, was built by Sir William Cecil, Lord Treasurer Burghley. He built three houses, "one in London for necessity, one at Burghley of competency for the mansion of his Barony, and another at Waltham for his younger son". The last, intended for a "little pile", grew into the vast mansion of Theobalds, with which James I. was so much enchanted that he persuaded Robert Cecil, Lord Salisbury, to exchange it for Hatfield, where that branch of the Cecils still lives. Burghley House was built at different times, but the whole was finished by 1587. It has a great interior court, at one end of which is a fine clock-tower, with a spire supported by heraldic emblems. The whole is finely imagined, but there is a certain coarseness in the way it is carried out. The chimneys are made into Doric pillars, an instance of the idolatry of the column: the ancients having left us no example of chimneys, nor Vitruvius having noticed their necessity, the neo-Classic used columns or vases for the purpose, forms for which there was Classic authority, though none for their being put to that use.

Burghley House.

HARDWICK HALL is a building of extraordinary interest. It is not built round a court, but is a compact solid block, symmetrical, two rooms deep divided by an axial wall, with six towers, two on each face and one at each end. It was built by Bess of Hardwick, the famous Countess of Shrewsbury, and finished in 1597. It remains very much as she left it: the floors are of beaten plaster on wooden joists: chambers and staircases are hung with splendid tapestries, and much old furniture remains. The

[*Photo, Dolby Bros.*

BURGHLEY HOUSE.

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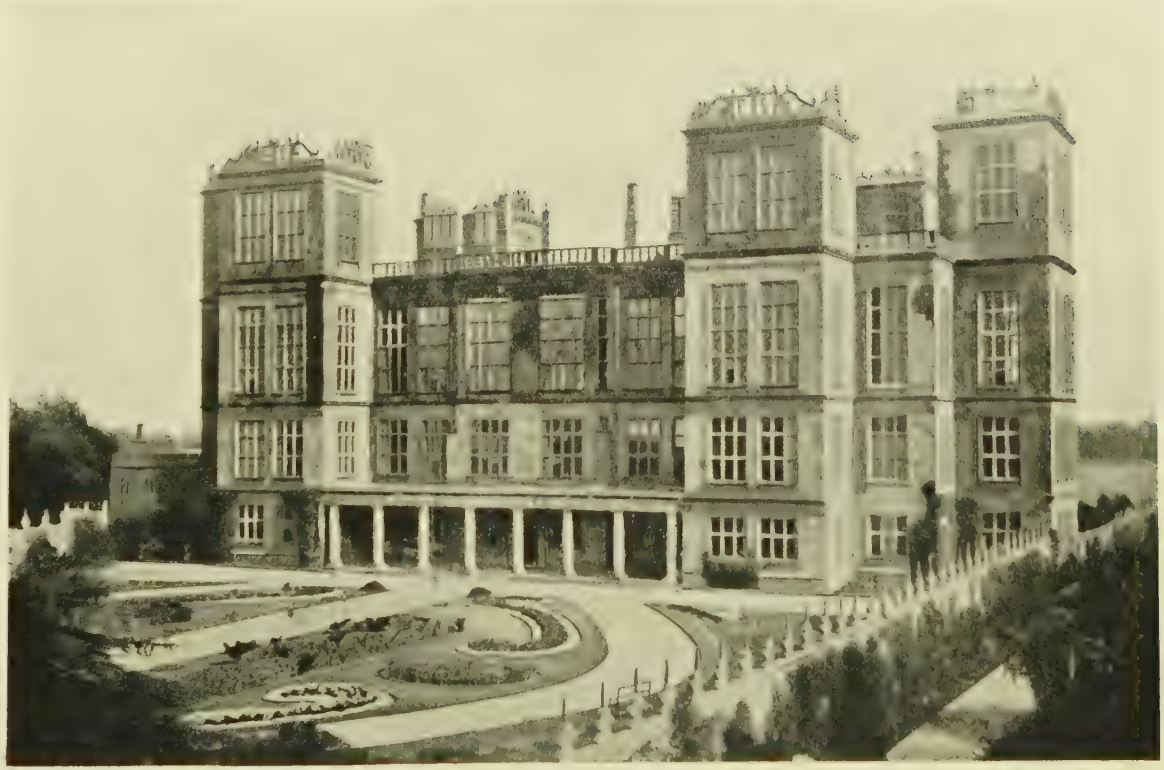

HARDWICK HALL.

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great Presence Chamber, prepared for Royal receptions, has tapestry on the lower half of the walls, and above it a frieze of woodland and hunting scenes in plaster modelled in high relief and painted; the whole forming a band of rich ornament, some 9 or 10 ft. high, round the room. It is, so far as I know, an unique example of the kind.

There is a room fitted up for the reception of Mary, Queen of Scots, who was in the charge of Lord Shrewsbury, which she never occupied, nor indeed was the hall built till afterwards. The room is prettily panelled and decorated with the arms of Scotland, and an inscription with Mary's titles, but the whole was brought from the older hall, of which the ruins stand hard by.

Plaster work was a feature of Elizabethan and Jacobean architecture. It may have been first introduced by the Italians who worked at Nonsuch, but it was soon learnt by English plasterers, who, in fact, made it an art of their own. The English ceilings of this period are purely national and excited the admiration of foreigners. The Duke of Wurtemberg, who was here in 1598, expressed himself astonished at their richness and beauty, which evidently shows they were something new to him. The plasterer went round the country with his pattern book to houses that were building. Lord Cobham's steward writes to his Lord that as soon as the floors are ready the plasterer should be sent for to bring models and patterns for "sealing", from which to choose. The names that have been preserved of the plasterers show that they were all English: the fine ceilings of the library and common-room of S. John's College, Cambridge, are by Cobb; those at Knole are by Richard Dungan, the King's plasterer; Charles Williams was employed at Longleat; and Sir William Cavendish writes from Hardwick to beg the services of the cunning plasterer "who had made divers pendants and flowered the Hall at Longleat". But plaster work of a ruder kind was an old art in England on the outside of cottages and half-timber work before the Italians came.

In Somersetshire there are panels of plaster work of the seventeenth century, with figures over chimney-pieces,

sometimes very well done; there is one in Dunster Castle in the room called King Charles's, and there are others at Quantoxhead. Of a later date is the fine building at Ipswich known as Sparrow's House, of which the outside is covered with plaster pargeting.

Knole House at Sevenoaks dates from very early times, but the building we now see was built by Sir Thomas Sackville, first Earl of Dorset, the poet, who succeeded Burghley as High Treasurer of England. He began to build at Knole in 1605, and continued till his sudden death in 1608. The house surrounds several courts and covers a great deal of ground. Nowhere are there statelier rooms and galleries, more beautiful plaster ceilings; nowhere is there a greater show of ancient fittings and furniture. The marble chimney-pieces are especially fine.

Renaissance at the Universities.

At our old Universities the Renaissance made its way slowly, and was not at first welcomed. Wolsey's work at Christchurch, and the two last pre-Reformation colleges, Brasenose and Corpus, are all in a pure Gothic style; and when at last the new style appeared it was only by grafting Roman details on Gothic designs, as had been done in the houses we have been describing. At Merton in the Fellows quadrangle, and at Wadham there are towers with Classic columns, and the old schools, now the Bodleian, have the famous tower with the five orders in the middle of a building which still clings to Gothic traceries. In plan the colleges follow pretty nearly Dr. Boorde's specification, with the addition of large chapels and larger halls, and libraries, of which Bodley's building is a famous example. Scarcely less interesting are the libraries of Merton and Corpus at Oxford, and S. John's at Cambridge, which, like several others, retain their original fittings. At Cambridge the buildings of Clare and Caius Colleges are especially noticeable; and Neville's court at Trinity and the beautiful fountains in the great court.

The half-timber work of England is remarkable. In Cheshire and the neighbouring counties it was carried to a pitch of ornamental design of which there is no

[*Photo, "Country Life."*

THE STONE COURT, KNOLE.

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instance abroad. Little Moreton Hall and Speke Hall are especially noticeable. The timbering is arranged in patterns between the main puncheons, the woodwork is painted or tarred black, and the panels are filled with plaster which is white. In a simpler form half-timbering was largely used, especially in those parts of England, such as Surrey and Sussex, where stone is scarce, and where, especially during the Middle Ages and the succeeding centuries, timber was abundant.

English half-timber work.

CHAPTER XXXI

THE LATER RENAISSANCE IN ENGLAND

In 1619 Inigo Jones laid the first stone of the Banqueting House in Whitehall, and in so doing opened a new chapter in the history of the English Renaissance. What Palladio and Vignola had been in Italy, that Inigo Jones was in England. Like them, he systematized the art and brought it into obedience to the Vitruvian canon and strict Classic orthodoxy. According to the writer of the *Parentalia*, "from the most profound Ignorance in Architecture, the most consummate Night of knowledge, *Inigo Jones* started up a Prodigy of Art, and vied even with his master *Palladio* himself".

Inigo Jones.

Thus far the effect of the Renaissance in England had been to make the forms of Roman architecture familiar, to recognize the different orders, and to introduce ornaments from the Italian school. All these features were adopted and applied upon the architecture to which the builders were accustomed. The fabric remained Gothic; the high gable, the mullioned window, the conventional plan all belonged to the old native art, the only one the builders knew; and on these structures they planted details borrowed from the new art as ornaments, with no architectural significance. The tower of the five orders in the Bodleian is an extreme example of this irrelevance.

To this eclecticism Inigo Jones put a stop. He taught the builders that these architectural forms with which they had been playing were all parts of a system, ruled by a grammar of which they knew nothing, but which must be learned if Classic architecture was to be correctly

[From "The Architect.

THE BANQUETING HOUSE, WHITEHALL.

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understood and practised. All the picturesque mixture of styles which had given us Kirby, Longleat, Knole, and Hardwick, tried by this new severe standard was pronounced idle and heretical, unwarranted by orthodox rule, irregular, and in fact barbarous.

The Banqueting House is a pure Palladian building, dropped down suddenly in the midst of a Tudor palace, and at a time when the old Gothic style with the addition of Jacobean semi-Classic details, was still being practised throughout the country. At Oxford, for instance, the chapels of Lincoln and Jesus Colleges, and the hall of Trinity, in the latest form of Gothic, were not yet begun; and the fan-vault over the hall staircase at Christchurch was built eleven years later.

The Banqueting House, Whitehall.

The Banqueting House was an instalment of what was to have been an enormous palace, reaching with seven courts from the river to the Park, and from Charing Cross to Westminster. The plans by Inigo Jones, or perhaps by Webb under his inspiration, exist and were published by Kent in 1727. They have some resemblance to a great plan by Philibert de l'Orme, in the sixteenth century, for the Tuileries, which, like this one for London, was never carried out. Jones's plan, however, was s ill larger than de l'Orme's, and from its enormous extent in one unbroken style would probably have been tedious in the extreme. It contained a fine circular court, with figures of gigantic "Persians" acting as supports against the piers of the lower storey, and caryatides against those of the upper. The Banqueting House is undoubtedly a building one cannot regard without pleasure. It is well proportioned, and has variety in the projection of the central part with full columns, while the side parts have pilasters. All the details are delicate and refined, and the whole is designed on the correct principles of Vitruvius and Palladio. At the same time its beauty is what I have described in a former chapter as *Pictorial*. The architectural features, which give the building its character, are purely ornamental; the columns carry nothing but projections,

The intended palace.

broken out from the entablature, for the sole purpose of being carried; they have nothing to do with the construction, or the realities of the fabric, and consequently the design must be pronounced not *real* but *pictorial* architecture.

S. Paul's, Covent Garden.

Inigo Jones's church of S. Paul in Covent Garden, on the other hand, is a truly honest building, plain and simple in the extreme, but with every feature legitimately used for a constructive purpose.

S. Paul's Cathedral.

In 1631 a commission was appointed for dealing with S. Paul's Cathedral, which had fallen into disrepair, and Jones was employed to repair it. He built a Corinthian portico with side towers, a fine thing in its way, but incongruous with the Norman nave behind it: the rest of the work was interrupted by the civil war. Jones varied his style: his first building in England was the chapel of Lincoln's Inn, which is Gothic; and he is credited, though on insufficient evidence, with the garden court, built by Laud at S. John's College, Oxford, which after all is more Gothic than Classic, in spite of the pediments and other features of Roman architecture in the gateways. The garden front especially, which is one of the most beautiful things in England, but for a few trifling ornaments in the Renaissance manner, is a purely Gothic conception.

S. John's, Oxford.

Inigo Jones died in 1652, after a troublous life. He was a Royalist and a Roman Catholic, and was shut up in Basing House during the famous siege. On the capture of the house he was taken prisoner, but seems to have escaped with a fine.

Sir Christopher Wren.

Sir Christopher Wren was born in 1632, son of the Dean of Windsor and nephew of the Bishop of Ely. In 1649, at the age of 17, he was admitted a fellow-commoner of Wadham College, Oxford, attracted no doubt by the scientific fame of Dr. Wilkins, who had been made Warden by the Parliamentary Commission. Here Evelyn saw "that prodigious young scholar, Mr. Christopher Wren". In 1653 he was elected

S. PAUL'S CATHEDRAL

(Reproduced from Birch's *London Churches*, by permission of Messrs. B. T. Batsford, Ltd.)

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Fellow of All Souls, and in 1661 Savilian professor of Astronomy. When he first turned his attention to architecture we are not told; but in 1663 he built a chapel for his uncle, the Bishop of Ely, at Pembroke College, Cambridge. His engagement for the Sheldonian theatre at Oxford, and the new quadrangle of Trinity College, perhaps led to his visit to France, where he was introduced to Bernini, then engaged on his fruitless endeavour to carry his design for a new Louvre. Wren says the crusty old Italian would barely allow him a hasty glance at his plans. He must, however, have seen the enormous architectural works then going on for Louis XIV. On his return he was consulted about the repair of S. Paul's; but, five days after a visit of inspection with the Dean, the Bishop, John Evelyn, and others, the Great Fire broke out and the church was burnt. Many schemes were proposed for repair; but in 1668 it was finally resolved to pull down the old building and build a new church.

Pembroke College, Cambridge.

S. Paul's Cathedral destroyed.

Wren's first design, which he never ceased to regret, is shown by a model to a large scale, now in the library of S. Paul's Cathedral. It has a dome of 108 ft. diameter within a circle of eight smaller domes, including those over the entrances to the choir and nave. The nave had a small dome over the western part and a fine colonnaded portico. But the plan was objected to by the cathedral clergy, who insisted on the traditional form of an English cathedral, and the present plan was adopted. The long nave required that the central cupola should be raised, or the dome would be hidden from a front view, as it is in S. Peter's in Rome by Carlo Maderno's long nave and façade. To effect this elevation Wren boldly placed on his drum a cone of brick, on which he built his lantern, thus adding 50 ft. to the total height. The result is perfectly successful. Wren's dome is incomparably the most beautiful of all domes externally, and it is well seen from every point of view. Not less successful are the two western towers. It was no easy task to design these towers so as to group well

Wren's first design.

Second design.

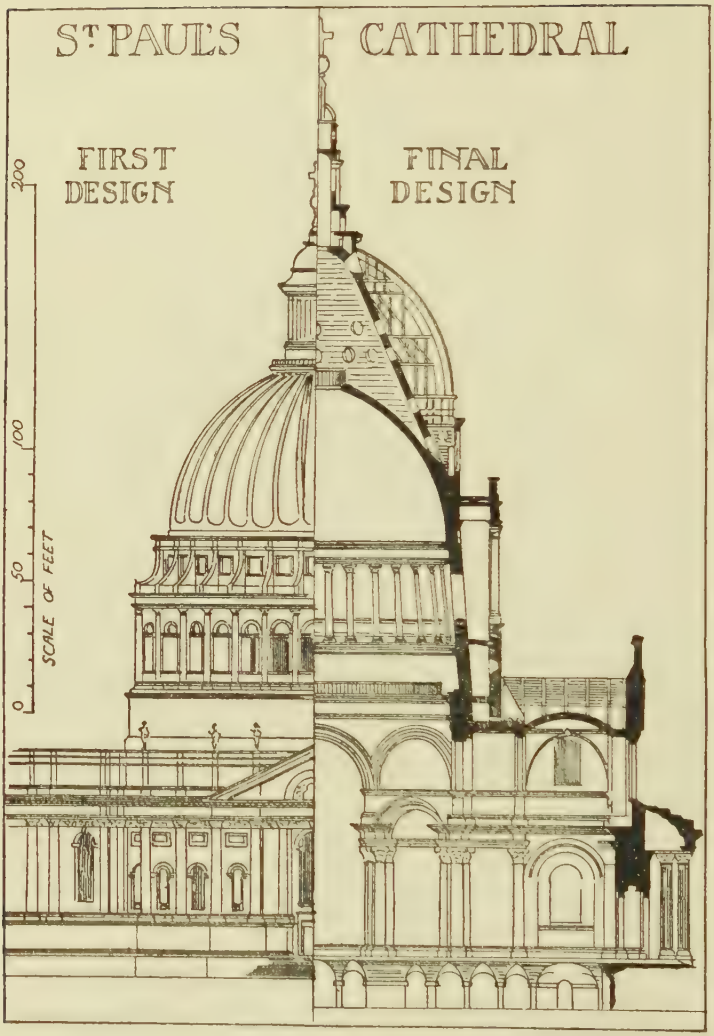
St PAUL'S CATHEDRAL
FIRST DESIGN
FINAL DESIGN
200
100
50
0
SCALE OF FEET

Fig. 54.

with the dome. San Gallo and others devised western campaniles for S. Peter's, but their slender lofty proportions would have gone very badly with the great swelling dome over the centre. Wren's towers are kept to a moderate height, and have a solid and substantial outline that harmonizes perfectly with the dome. In them, as in all he did, Wren showed an infallible judgment and a true eye for a good outline.

The brick cone.

Wren's brick cone has been criticized as a sham, giving a false idea of the height of the dome; but it is justified by the condition that has been explained of the length of the nave. To have raised the interior dome would have been a mistake; the dome for interior effect is quite as high as would have been tolerable; to have raised it further would have been to make it a tower with a domical covering. It was impossible to make a simple dome, which would have been sightly both from within and from without. Wren's brick cone is reasonable and justifiable.

The screen walls.

Another criticism has been directed against the walls of the upper stage of the side walls, which have nothing behind them, and simply hide the Gothic constructions of flying buttresses against the nave walls. For these it is more difficult to find a justification. It has been suggested, however, by Mr. Somers Clarke, formerly architect in charge of S. Paul's, that these screen walls have the effect of weighting the side walls of the building, and so distributing the pressure of the dome, which would otherwise be confined to the centre of the church and bear unfairly on the thin bed of hard clay to which Wren trusted.

Wren's new churches.

The Great Fire gave Wren a splendid field for his genius. He was unable to carry his grand scheme for laying out the City afresh, but in rebuilding the fifty or more churches that had perished, he had ample opportunity of displaying his invention. They are all varied, and each has a distinct character. Their towers and steeples are all different and all show an unerring eye for a good outline. Many of them show great ingenuity in adaptation to an awkward site. His

churches themselves were built on a different plan from the old, and are arranged conformably with the service of the Reformed Protestant church. For this reason he abandoned the chancel of the Gothic church. "It would be vain", he said, "to build churches in which all the congregation could not see and hear. For the Romanists it is enough if they hear the murmur of the Mass and see the elevation of the Host, but our churches are to be fitted for auditories." Long naves too he

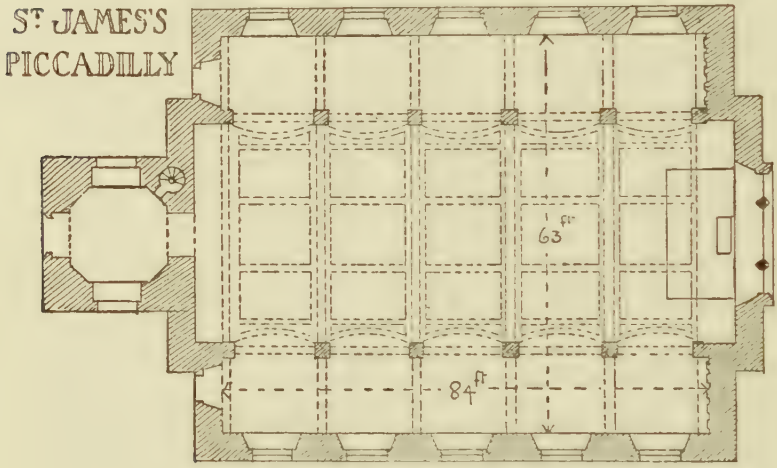

Fig. 55.

condemned as "impertinent" to our service, which does not use processions. Wren's churches are something novel. (Fig. 55.) The Roman basilica, with galleries, like S. Agnese at Rome, is something like them, having no structural chancel, the choir being in the apse behind the altar.

Their novelty.

Wren's interiors are fitted with beautiful woodwork; pulpits with splendid stairs and testers, fine wall-panelling, lovely fonts and font-covers, magnificent organ-cases and organ-lofts, spacious vestibules, and fine staircases leading to the galleries.

Their interiors.

CAMBRIDGE—TRINITY COLLEGE LIBRARY.

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GREENWICH HOSPITAL.

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The old palace of GREENWICH, where Elizabeth was born and had held her court, was pulled down by Charles II., and a new one begun by Webb from a design left by Inigo Jones. One block was partly finished, and Wren put the river front to it in 1678. Queen Mary having suggested building a hospital for seamen, Wren recommended the conversion of the intended palace to that purpose, and the result is the present magnificent group of buildings. A wide avenue from the river leads up to the Queen's house, which was built by Inigo Jones; right and left of this avenue are the four blocks of the Hospital, the two inner blocks drawn forward so that the domed towers with which they finish show from the river between the two outer blocks which are more widely spaced apart. The whole effect, with the fine colonnades that border the avenue, is superb; there is nothing to surpass it in the whole range of Renaissance architecture.

Greenwich Hospital.

One of Wren's finest buildings is the LIBRARY of TRINITY COLLEGE, Cambridge. The ground floor is an open colonnade, facing the river at the back and Neville's Court in front. To avoid making this storey unduly lofty, Wren has brought the library floor down to the springing of the arches, filling in the lunettes of the arch with solid masonry. The extra height above thus gained is thrown into the library. In the interior the cases are kept below the fine range of windows, which, but for this contrivance, they could not have been. Wren has done the same thing in a rather different manner in the fine court he built at Hampton Court for William III., where the ground floor arches are partly blocked in the same way and for the same purpose. To the Classic purist this device is naturally an offence, and so are other liberties Wren has taken with the orders. Why, ask his critics, has he grouped the columns in his west front at S. Paul's in pairs instead of spacing them evenly, as in all the ancient examples and all the text-books? Perrault, when blamed by the critics for grouping his columns in pairs in the same way, at the Louvre, replied that he had

Trinity College Library.

Hampton Court.

no doubt the ancients would have done the same had they thought of it. Wren's work, to these critics, seems irregular, the work of an astronomer who had taken to architecture without any adequate training. To others, on the contrary, it is this very liberty in design that gives it its value and endows it with life. Through all his work the same freedom in handling architectural form is remarkable. What, for instance, can be further from ancient example than Wren's steeples, such as that of Bow Church, S. Bride's, Christchurch, and scores more, which, though they employ Classic details, would have astonished Vitruvius quite as much as Salisbury or Norwich steeple? In nothing is Wren's singular genius more remarkable than in its versatility, which, however, never betrayed him into anything approaching eccentricity or affectation. Through all he did runs a vein of strong common sense.

Grinling Gibbons.

Under Wren's direction a school of wood-carving, which in its way is unrivalled, was founded by Grinling Gibbons, an artist whom Evelyn discovered working in a humble shed at Deptford, and whom he introduced to the King and, what was more important, to Sir Christopher. The King took Gibbons with his specimen of carving to the Queen's room, and Evelyn has left an amusing account of their interruption by the impertinences of a French milliner, which caused him to withdraw his protégé in disgust. Gibbons distinguished himself also in statuary, as in the excellent bronze figure of James II.

Wren, who had been infamously treated by the Commissioners under George I., ended his honourable life in 1723 in his ninety-first year. For his work on cathedral and parish churches he had only asked a salary of £300 a year, and he built Greenwich Hospital for Queen Mary gratuitously, "preferring in this as in every other Passage of his Life the publick Service to any private Advantage of his own, by the Acquist of Wealth, of which he had always a great Contempt".[1]

Hawksmoor, who had been Wren's assistant, and

[1] *Parentalia*, p. 328.

QUEEN'S COLLEGE, OXFORD.

To face page 285.

may, I suppose, be called his only pupil, was a man of considerable originality. He was employed a good deal at Oxford, where he built the old Clarendon Building in Broad Street, with which it is supposed Vanbrugh was also partly connected. Hawksmoor's new quadrangle for Queen's College is a very stately building facing the High Street, with a cloister, over the gateway of which is a graceful Tempietto. The hall and chapel on the opposite side of the quadrangle are severe and dignified. It is hard to imagine what induced him to try his hand at unfamiliar Gothic in the farcical pair of towers of the inner quadrangle of All Souls. He made a design for pulling down and entirely rebuilding Brasenose College in a Classic style, which is illustrated in the Oxford *Almanac* for 1723. His churches of S. Alfege at Greenwich, S. George's, Bloomsbury, and Christchurch, Spitalfields, all show knowledge and originality. That of S. Mary Woolnoth, in the City, is a well-known object of study by architectural students. At S. George's, Bloomsbury, he has attempted in the tower and steeple a reproduction of the Mausoleum from the ancient descriptions.

Hawksmoor.

Vanbrugh began life as a soldier, was imprisoned, he scarce knew why, in the Bastile, and was first known as a wit and a writer of comedy. How he became an architect we do not know, but in 1701, when thirty-five years old, he was building the great palace of Castle Howard for Lord Carlisle. Through the Howards he was made Clarenceux Herald, and would have been Garter had not the King pointed out the impropriety of conferring that dignity on a man who in one of his comedies had ridiculed the noble science of Arms. In 1702 he was made Comptroller of the Board of Works, and seems to have been at the same time lessee, manager, author, and also architect of the Queen's Opera House, in which multiform capacity it is not surprising that he lost money.

Vanbrugh.

In 1705 he was appointed architect of Blenheim, the palace which a grateful nation was to bestow on the Duke of Marlborough. The Duchess quarrelled with him after

the Duke's death in 1722, finished the palace without him, and shut the Park gates against his wife. He died in 1726.

Blenheim.

Blenheim is massive, ponderous, magnificent, but it is impossible to say it is beautiful. It was enormously expensive; not only the basement storey, but the state-rooms are vaulted in stone; the scale is immense, the length of the front including the wings is 800 ft., that of the central block alone is 320, and Castle Howard is on a scale scarcely inferior to Blenheim. Both are built on symmetrical lines; wing corresponds to wing, and the chapel in one is balanced by the kitchen in the other. Great houses were now planned on a system, of which Palladio's book sets the example. There had to be a central block with a great hall, rising up through two or more storeys, and right and left of this were other blocks of buildings standing more or less apart, and connected with the central block by colonnades, generally curving in a sweep round the courtyard in front. This was in the main the accepted plan for a great nobleman's house in the eighteenth century, subject to minor alterations and variations; and it was followed as regularly as Dr. Boorde's prescription for a mansion in the Tudor times had been.

James Gibbs.

James Gibbs is the architect whose work most nearly follows and carries on the tradition of Wren. He was the son of an Aberdeen merchant and born in 1682, and he began to practise as an architect in 1700 after travel in Italy, where he studied under the younger Fontana. His church of S. Mary-le-Strand was built between 1714 and 1723, one of fifty new churches ordered by an Act of 1708 under Queen Anne. Being in an important place, Gibbs says the commissioners spared no expense in beautifying it. The original plan, however, had to be altered; it was to have had only a bell-cot at the west end, and at a little distance in front was to have been a column carrying a figure of the queen. But Queen Anne died, the column was given up, and Gibbs was told instead of it to give his church a steeple. But the building was prepared for only a small bell-tower 14 ft. from east to west, too narrow in

S. Mary-le-Strand.

S. MARY-LE-STRAND, LONDON.

To face page 286.

THE RADCLIFFE LIBRARY, OXFORD.

To face page 287.

proportion for a tower. Gibbs did his best, by spreading out his tower north and south, but it is starved from east to west, as may be seen in a side view. Originally, however, a side view was impossible, owing to the narrowness of the street, and it may again be masked by high buildings in the present scheme of construction now in progress north of the church. With due allowance for this defect Gibbs's steeple of S. Mary's is extremely beautiful, and may fairly be ranked with those by Wren. He succeeded also in the steeple of S. Clement Danes, which Wren had prepared for, but not constructed.

S. Clement Danes.

Not less successful is his church of S. Martin's-in-the-Fields, which stands so happily at the top of Trafalgar Square.

S. Martin's.

At Cambridge Gibbs built a fine block of buildings at KING'S COLLEGE with a great archway in the middle, which has all the dignity of a Roman palace. The SENATE HOUSE is also his work.

King's College, Cambridge.

At Oxford Gibbs built the RADCLIFFE LIBRARY in the centre of the town, entirely surrounded by university buildings; its swelling dome forms such a conspicuous feature in all views of the city that it is difficult to imagine Oxford without it. In designing it I cannot help thinking Gibbs must have seen plans of the Valois Chapel, which was partly built though not finished at S. Denis for Catherine de' Medici. The general idea is very similar, and the dimensions are almost identical. The Valois Chapel was stopped before the dome was reached, and the whole had been pulled down before Gibbs's time, but he may very well have seen and studied drawings of it. But Gibbs's design is a great improvement on that by Primaticcio, or Lescot, and Du Cerceau.

Radcliffe Library.

With Gibbs, who died in 1754, the first school of the Renaissance in England expired. With them we still find some of the versatility of Wren; individuality was not extinguished; architecture, in spite of text-books and formulas, was yet alive; imagination was not yet crushed out by convention. But the vitality of the movement

was at an end when the last of the group died, and their successors became more and more enslaved to strict Vitruvian dogma. Palladio almost took the place of Vitruvius, and his book on architecture was a fertile source of suggestion to the architects of the eighteenth century, who borrowed from it freely. The designs of Mereworth in Kent, and Lord Burlington's villa at Chiswick, are practically from Palladio, and the plan of

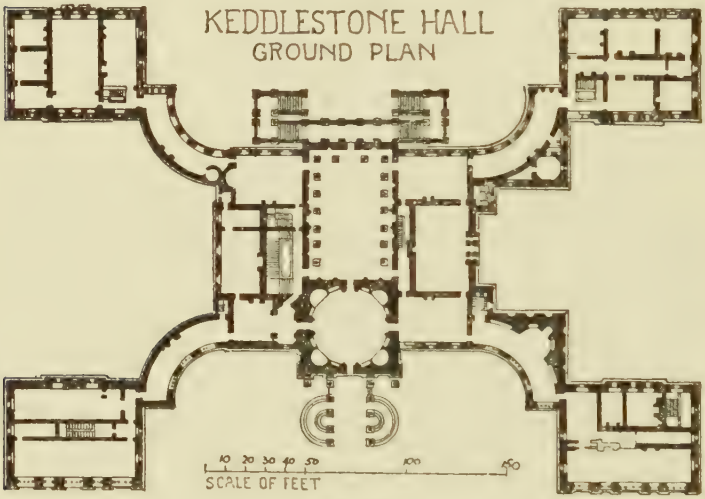

Fig. 56.

Keddlestone Hall (Fig. 56), with its central hall, its four outstanding blocks, and the four colonnaded galleries connecting them, is an almost exact copy of a design in Palladio's book for a villa on the Brenta.

In 1702 and 1703 Queen Anne and Prince George went to Bath to drink the water; the shabby little town became fashionable, and a great building period set in. The opportunity was seized in 1724 by John Wood, an architect in Yorkshire, and before the end of the century he and his son John had transformed Bath into a stately city, with fine streets and squares lined with stone houses

PLATE LXXXVI.

BATH TITAN BARROW.

To face page 289.

of a sober but not undignified style, and a circus and crescent of some magnificence.

In several of the houses the Woods made really fine interiors. No. 15 Queen Square is beautifully finished, with a carved staircase and plaster medallions and modelling round the upper part of the hall, and No. 24, where the elder Wood died in 1754, is finely panelled and decorated. The style was adopted in the neighbourhood; Prior Park, though it has fine parts, is not the best, but at Widcomb and Bathford are beautifully designed houses in a classic style, well carried out (Plate LXXXVI.). Bath itself, as left by the Woods, was remarkable as a stately city, in sober good taste, free from pretence and vulgarity. Modern intrusions have somewhat broken through this reserve.

Of later architects may be mentioned Kent, who designed the Horse-guards, and lived in Lord Burlington's house and helped him in his design; Campbell, Ware and Flitcroft; the two Dances, of whom the elder built the Mansion House, and the younger the grim prison of Newgate, which so well expressed its purpose. The art by this time, with the multiplication of text-books, had become so familiar to the workmen, that tradition took the place of direct instruction. Wren, in one instance, almost apologizes for sending full-size drawings of details. The workmen could be trusted to carry out general drawings in detail. Amateur architects sprang up, helped by Vignola and others, like Lord Burlington and Dean Aldrich, whose designs were carried out, partly perhaps with the help of professional friends. Lord Burlington, for instance, had Kent at his elbow, and Aldrich knew Wren, and is supposed to have had the help of the draughtsmanship of Hawksmoor.

The last architect of repute of the old school was Sir William Chambers, who began to study architecture in 1744 at the age of eighteen, and in 1769 published his *Treatise on Architecture*, which still commands respect as a text-book.

Chambers's principal work, by which he is chiefly remembered, is Somerset House, which he began in 1776.

The river front is magnificent, and certainly one of the finest things in London. The Strand front is contracted, but the colonnaded entrance may be compared with that of the Farnese Palace in Rome.

Towards the middle and end of the century signs of a revolt against the Palladian régime began to appear. The work of the Adams came as a relief from strict Classic rule, with its softened details and somewhat effeminate prettiness. Later still began the reign of Romanticism, and Horace Walpole's Gothic fancies, which, beginning in fiction and pursued with mistaken ideas, prepared the way for the attempted revival of Gothic architecture in the nineteenth century which swept away the traditions of the Renaissance.

SOMERSET HOUSE, LONDON.

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CHAPTER XXXII

THE RENAISSANCE IN FRANCE

ITALY, the lovely land between the mountains and the sea,

> Che natura dall' altre ha divisa,
> E recinta coll' Alpe e col mar,[1]

had always provoked the greed of her neighbours, savage, barbarian and civilized, and exposed her to invasion from without. In ancient times Gaul, Goth and Vandal had ravaged the land and sacked the cities ; in later days German emperors repeatedly descended to enforce their imperial rule. Nor was she safe from enemies within. Popes, faithless to their country, had invited strangers from beyond the Alps ; they called in the Franks, they called in Charles of Anjou ; and so when Ludovico Sforza el Moro, the usurping Duke of Milan, in an evil moment invited Charles VIII. of France to come and assert afresh the Angevin claims on the kingdom of Naples, his proposal found ready acceptance. In 1494 the French army crossed the Alps and invaded Italy, and the French for the first time became acquainted with the treasures of Italian art.

Charles VIII. in Italy.

It does not appear that there had been any great literary revival in France to prepare the way for the Renaissance, though the number of books printed in France before 1500 compares favourably with that of those printed in England up to that date. In Castiglione's *Cortegiano* Count Ludovico is made to say : " The French only recognize the nobility of arms, and everything else they hold in no esteem ; so that not only have they no appreciation of letters,

Literature in France.

[1] Manzoni, *Il Carmagnola*, II. vi., Coro.

but they abhor them ; they hold all students of literature to be the vilest of men, and they think it the most villainous thing to say of any one that he is a clerk". Hallam says that the only French book published in the fifteenth century that would enter into the studies of a literary man is that of Philippe de Comines.

In architecture the Flamboyant style still ruled in France unquestioned. House architecture had developed into plans of greater convenience, and even splendour, as it had done in England. But the palaces of Jacques Cœur and Cujas at Bourges, of Robertet at Blois, in the Hôtel d'Alluye, at the Hôtel of the Abbot of Cluny at Paris, were all in the current Flamboyant style.

There was no idea in the mind of the builders of that time of reviving the long-forgotten forms of Roman art. In fact, in France as in England, the word Renaissance is a misnomer, for in neither country had Roman architecture ever lived before since the fall of the empire. It had disappeared and been obliterated by the arts of the Middle Ages as thoroughly as if it had never been. It is true that in Provence and Burgundy some details were for a time imitated more or less vaguely from ancient ornament, but they had no effect on the architecture and soon disappeared. The introduction of Roman architecture in France in the fifteenth century was a movement from outside, not a growth from within.

To the Frenchmen who accompanied Charles VIII. in 1494 the luxury and splendour of Italian life must have come as a revelation, and contrasted strongly with the comparative roughness of their domestic establishment at home. They knew nothing of the Italian Renaissance, which had been running its course for the best part of a century. The golden age was in fact over—the age of Brunelleschi, Da Majano, Alberti and Michellozzo in architecture ; of Donatello, Ghiberti, Rossellino, Mino, Civitale, Verrocchio and Desiderio da Settignano in sculpture ; and of Massacio, Fra Angelico, Gozzoli, Signorelli, Mantegna and Botticelli in painting. All the wonders of the Italian *quattrocento* were before them. De Comines writes of Venice that its splendour surpassed

that of every other city. Charles himself writes to his brother-in-law, from Naples: "You could not believe what beautiful gardens there are in this city. They only want Adam and Eve to make them an earthly Paradise. And moreover, I have found here the best painters. . . . In France the best pictures do not approach those here." The Bishop of S. Malo writes to Queen Anne: "The beauty of these places is a thing incredible".

In Florence, Charles was lodged in the Medici palace from which Piero II. had fled; he had never been so splendidly housed as in this house of a merchant prince, and he could hardly be got to leave it, on the urgent appeal of Savonarola. He did not quit it empty-handed. He treated Florence like a conquered city, in spite of the protests of the Signoria, and rifled the treasures he found there with freedom. Others followed his example, but he was the greatest robber. Pictures, marbles, tapestries, medals in gold and silver, and other valuables, in packages weighing 87,000 lb., were sent by sea to Lyons, to be conveyed to Amboise, where he was building a palace.

Spoils of Florence.

But besides these treasures Charles also sent a colony of twenty-two men and women artists to form a school at Amboise, which was afterwards extended to Blois and Tours.

Italian school at Amboise.

During the reign of Louis XII. Italian details began to creep in and to be mixed with the Gothic art of the day. But the wing built by that prince at Blois is still Gothic, though the columns of the Loggia have Italian arabesques; and there is a similar mixture of styles in the Hôtel d'Alluye at Blois, which was built by his minister Florimond Robertet, where there are terra-cotta medallions of the Caesars.

The family of the GIUSTI, Italians of the colony at Tours, produced a number of works in the Renaissance manner, such as fonts and monuments, and the fine tomb in Nantes Cathedral by Michel Colombe of Duke Francis II. of Brittany and his Duchess is entirely in the new style. At GAILLON, a palace erected for Cardinal d'Amboise in Flamboyant Gothic, the chapel

The Giusti and Michel Colombe.

was fitted with stalls which are now at S. Denis, delicately carved with Italian arabesques and inlaid with intarsia; and there is a fragment of a loggia in the Italian style from Gaillon, now preserved at the École des Beaux Arts in Paris, which is of considerable size and importance. There were also roundels in terra-cotta by Italians like those by Da Majano at Hampton Court. Yet the architecture of Gaillon remained Flamboyant Gothic, with round bastions at the corners, though instead of being defensible, one contained the chapel, and another the cardinal's private apartments.

Gaillon.

Thus far the Renaissance had not had much effect on the architecture, and while the work at Gaillon was going on, Martin Chambiges was building the Gothic transept at Beauvais, Jean Texier was raising the beautiful north-west spire at Chartres, the tower of S. Jacques de la Boucherie was rising at Paris, and the gorgeous Flamboyant fabrics of Brou and Albi were being finished.

Architecture not affected.

And yet the patrons of art at this time, while decorating their Gothic buildings with trimmings of Italian ornament, believed they had caught the true spirit of the Renaissance. Geoffroy Tory actually claims that at Amboise, Gaillon, Tours, Blois and Paris you may see buildings, public and private, in a classical style, "so beautiful and perfect that the French architects are judged to surpass not only the Italians, but their teachers, the Dorians and Ionians".[1]

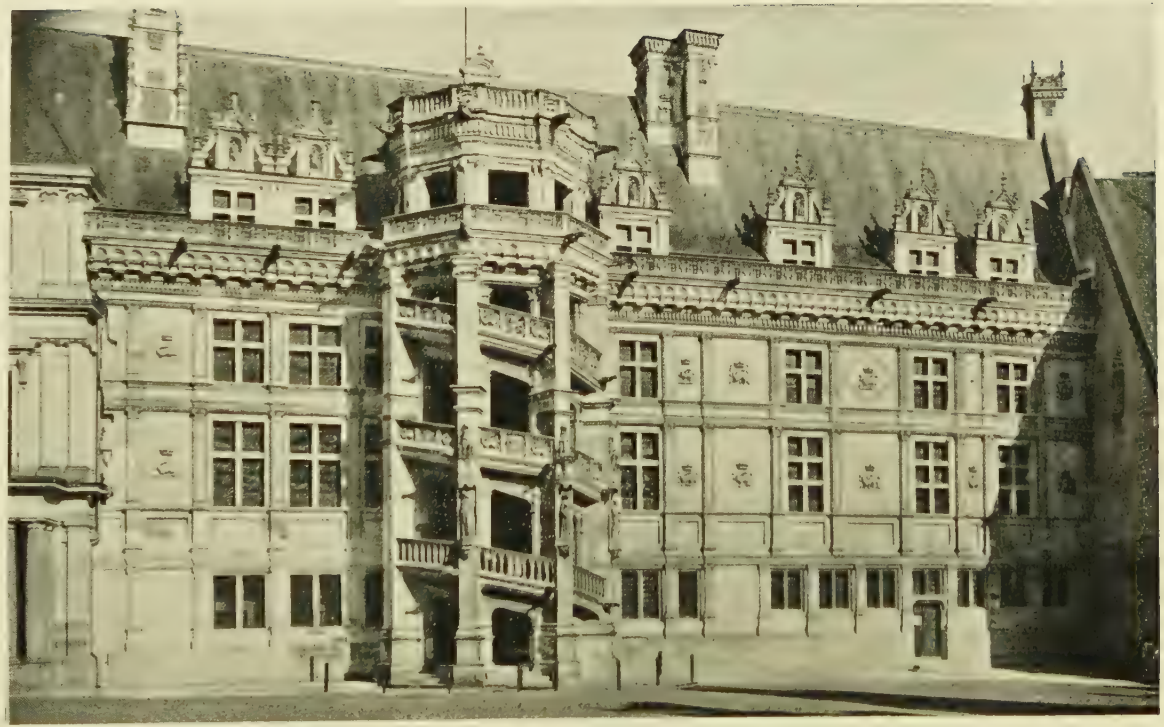
With the accession of Francis I. in 1515, however, the new art, no longer content with mere ornament, began to influence the architecture. Both in England and France, with the accession of their youthful kings a great building era set in. But Henry's extravagance was surpassed by Francis, who added largely to the château of Blois; entirely remodelled that of Fontainebleau; built Chambord, Madrid in the Bois de Boulogne, Villers-Cotterets, S. Germain-en-Laye, La Muette, and began to rebuild the palace of the Louvre.

Francis I.

[1] Preface to Alberti's *De Re-edificatoria*, published 1512. Cited, Tilley, *Literature of the French Renaissance*.

BLOIS—CHÂTEAU: EXTERIOR.

To face page 294.



BLOIS—NORTH SIDE OF THE COURT.

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Between 1515 and 1519 Francis built the wing forming the north side of the court of the château at Blois. Its front to the court contains the famous staircase with its open arches, and the north front is faced with open arcades surmounted by a loggia. From this new building, only thirteen years later than the flamboyant East wing of Louis XII., all Gothic detail has disappeared. The walls are divided by pilasters, with capitals and bases in each storey, the invention of Alberti at the Palazzo Rucellai half a century before ; the storeys are divided by Classic entablatures; and the staircase is enriched with Italian arabesques, beautifully carved. And yet the main structure is still Gothic ; the windows have mullions and transomes; the high roofs have dormers, Renaissance versions of their flamboyant predecessors ; the statues stand in niches in the old way, though the canopies are modelled in the new fashion ; the architect, in short, has worked with the freedom of the Middle Ages ; unfettered as yet by Classic dogma, for Vitruvius had not yet been translated into French.

Blois.

The master-mason is said to have been Jacques Sourdeau. On the other hand, the design has been attributed to Domenico da Cortona, known as Boccadoro-Chrysostom, from his mellifluous speech, though the design does not suggest an Italian author ; Palustre attributes it to Charles Viart, who, he says, built the Hôtel de Ville at Orleans and that at Beaugency.

While Blois was still building, Francis, in 1519 or 1520, began the great château of Chambord a few miles away. It is an immense building planned symmetrically, but preserving something of the arrangement of the old castle. There is a central block, corresponding to the old keep or donjon, within a court surrounded by buildings, and the castellated idea is maintained by the enormous round bastions at the corners. The central block is divided by a cruciform corridor, and in the middle, where the four arms meet, is the famous staircase (Fig. 57), constructed with two stairways winding round a central tower, like two threads to a screw which never meet, and which discharge at each landing

Chambord.

The staircase.

at opposite sides. The four arms of the cross form four halls, in one of which it is said Molière's *Bourgeois Gentilhomme* was performed before Louis XIV. The four halls

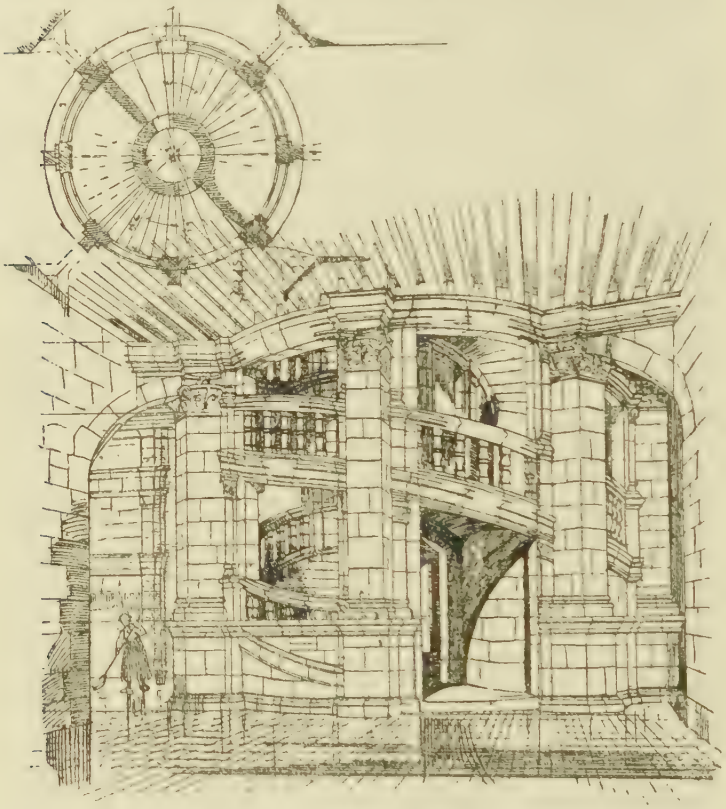
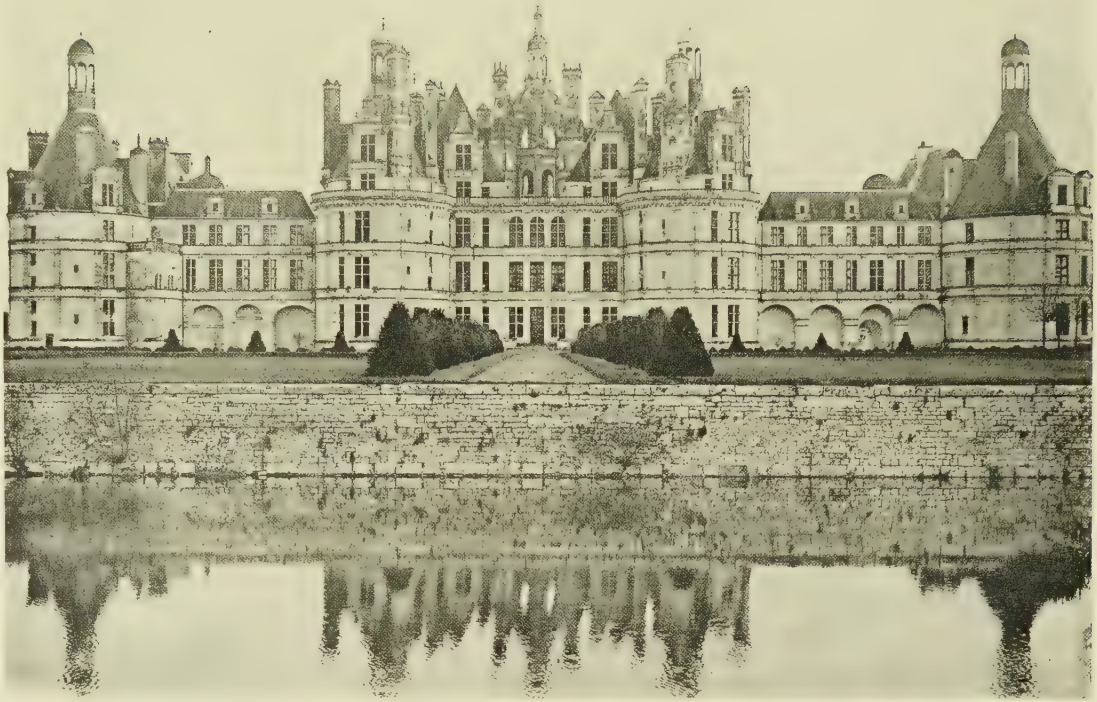


Fig. 57.—Chambord Staircase.

are lit from the ends, and the stairs by a lantern on the roof and by openings between its piers.

This lantern forms the centre of a bewildering group of chimneys and dormers with which the roof is crowded. Up to the wall plate the design of Chambord had been



THE CHÂTEAU, CHAMBORD.

To face page 296.

FONTAINEBLEAU—GALERIE DU ROI.

To face page 297.

sane ; above, it is a confused mass of lofty structures, panelled, pinnacled, adorned with niches and studded with discs of black stone or slate inlaid in the masonry. Mixed with these chimneys and dormers are conical roofs, and in the centre is the great lantern tower over the staircase, octagonal with eight flying arches to a central pinnacle.

The roof.

Palustre speaks of Pierre Nepven, called Trinqueau, as the " immortal architect of Chambord ". On the other hand, it is known that Boccadoro had made a model for Chambord, and Denis Sourdeau, son of the architect at Blois, is said to have been master-mason jointly with Nepven. But the whole of this is doubtful.

The architect.

In 1526 Francis returned from his captivity in Spain, and in 1528 began to remodel the old castle of FONTAINEBLEAU. He bought out adjoining owners, and employed Gilles le Breton to build the *Basse-Cour* and connect it by a gallery to the *Cour de l'Ovale*. Italian artists were engaged for the decoration. In 1530 Il Rosso came, a Florentine painter and architect, who was followed in the next year by Primaticcio. IL ROSSO worked at Fontainebleau till 1541, when he destroyed himself in a fit of remorse for having by mistake accused one of his favourite associates of theft. The principal part of his work was the decoration of the Galerie du Roi with pictures in fresco, framed in stucco-work of figures and ornament in high relief, which still remain to testify to his great ability and fertility of invention. The paintings unhappily have not escaped restoration. The whole effect is rich and interesting. The lower part of the wall has a dado with good carvings of Francis's badge, the Salamander and other devices.

Fontainebleau.

Il Rosso.

PRIMATICCIO finished Il Rosso's work and decorated the great Ball-room with paintings, which have been sadly injured by modern repainting. He is supposed to have designed the tomb of Henri II. at S. Denis, and he died at Paris in 1570.

Primaticcio.

BENVENUTO CELLINI was in Paris from 1540 to 1545,

where he had, as usual, a stormy career. He made an enemy of Madame d'Étampes, the king's mistress, and after making a famous salt-cellar for the king, threw up all his engagements and made his escape to Italy.

Benvenuto Cellini.

The Salle du Bal is the most striking chamber at Fontainebleau from the great depth of the embrasures in which the windows are set. Gilles de Breton intended to cover it with a coved vault of stone, and for abutment, in order to avoid buttresses, he used the curtain walls of the old castle, which were three metres thick. His vault was not approved, and the present wooden ceiling was substituted, but the enormous piers remain, and give a fine character to the room.

Salle du Bal.

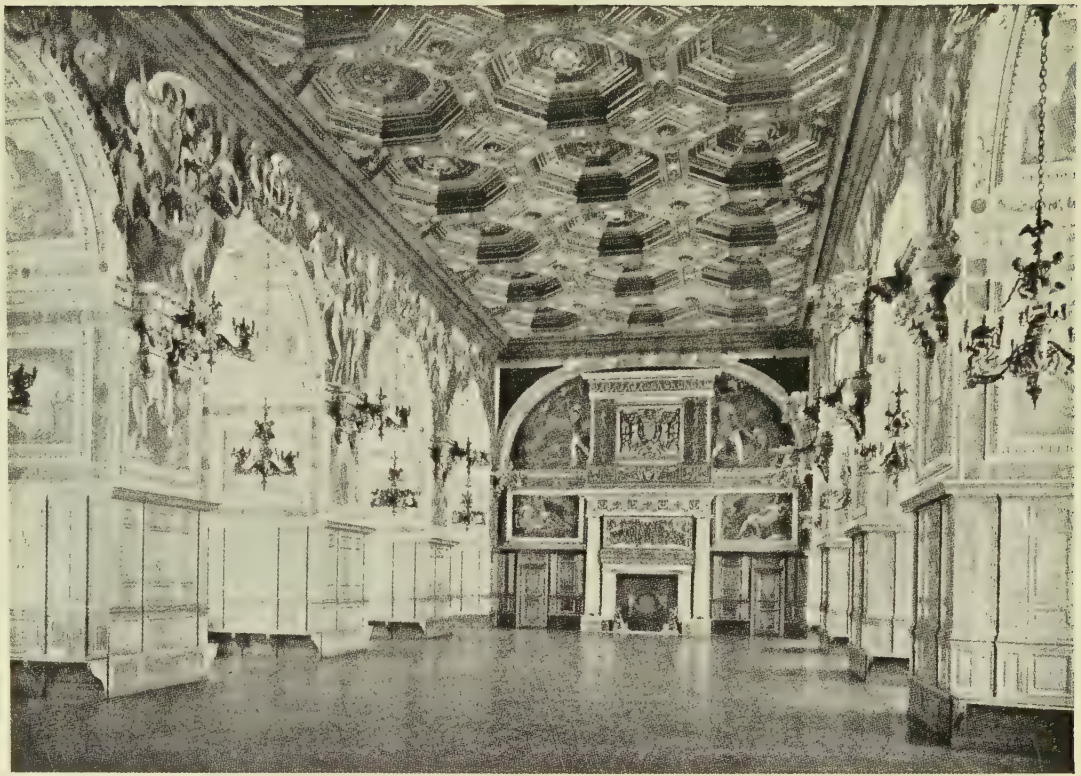
The palace of Madrid in the Bois de Boulogne, another of Francis's extravagances, was remarkable for the linings of majolica on its walls by Girolamo della Robbia, a great-nephew of Luca. The palace was destroyed by the Revolutionary Assembly in 1792.

Madrid.

A new class of wealthy magnates had arisen at this date. Louis XI. had made it his policy to transfer the management of government from the nobles to an inferior class of men, who would be his creatures, subservient to his policy of centralizing all power in himself. These new magnates naturally earned the hate and scorn of the old nobility. Honest Jacques Cœur, even in the reign of Charles VII., had been hounded out of his splendid hôtel at Bourges, and saved his life by an escape to Italy. Under Charles VIII. and Louis XII., however, the public purse was in the hands of the new men, who rose in influence and played a great part in politics. For eighty years the finances of the country were in the hands of a group drawn from the bourgeoisie, who were wealthy, and to whom we owe many of the châteaux for which the Renaissance is famous. Curiously enough, they were many of them related and connected by marriage. Robertet, who built the Hôtel d'Alluye at Blois and a great château at Bury, was connected with the families of Berthelot, Gaillard, Beaune, Briconnet, Rugé and Ponchet, all of

The new aristocracy.

The financiers.



FONTAINEBLEAU—SALLE DU BAL.

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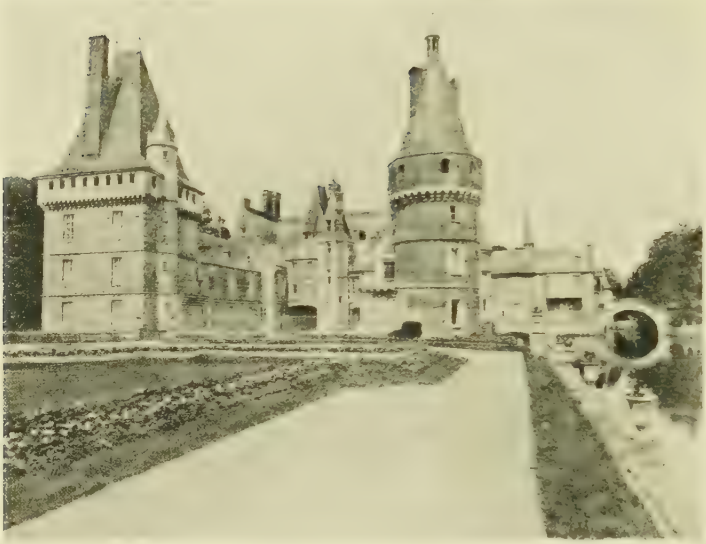

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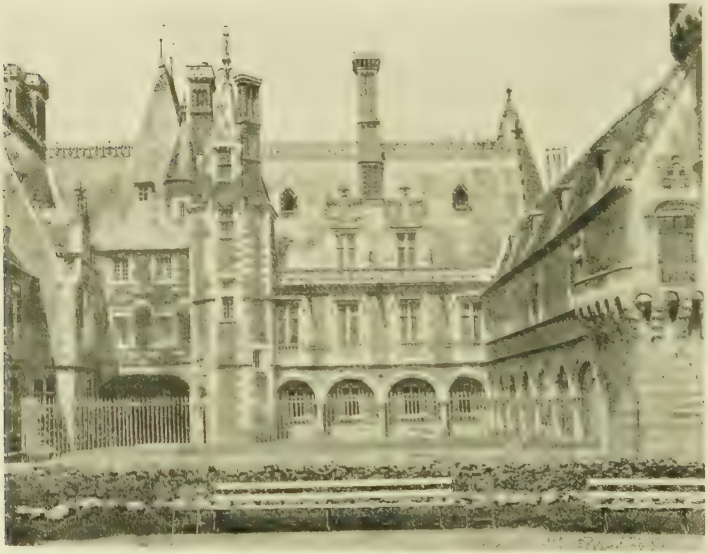

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THE CHÂTEAU DE MAINTENANT.

To face page 299.

them engaged in official work. Their position was insecure, however; the nobles hated them; the king's favour was uncertain, and might fail at any time. Jacque de Beaune, Lord of Semblançay, was hanged at Montfaucon at the instance of Louise of Savoy, Francis I.'s mother, who had kept back for her own use the money given him to pay the army. Jean Ponchet perished with him; Berthelot, the builder of Azay-le-Rideau, fled for his life on an unjust charge; Bohier's son had to surrender Chenonceaux to Diane de Poitiers, mistress of Henri II.

The disasters that overtook these men foreshadowed that of Fouquet in the time of Louis XIV., who perhaps deserved his fate better than they did. Most of them belonged to Tours, and it is in Touraine that we find their country houses. Touraine in the time of Francis I. had in fact become the social centre of France, and no other part of France is so thickly studded with great country houses.

The French château.

For a long time the French house, as in England, continued to be built round a courtyard, a tradition of the old *château fort*. This in time disappeared, but another feature of the old fortalice that the French gave up with reluctance was the great round bastion on the angle of the building. They survive in the unfortified houses of Azay-le-Rideau, Chenonceaux, Maintenon, Valençay and Serrant. Their high conical roofs in the earlier examples are picturesque, but in the later buildings they have ugly roofs of a domical or bulbous form.

The high roof.

Another feature of the older style that the French persistently retained was the high roofs, which surprised Serlio, who remarks upon them, and the dormers that light the rooms they contain. Projecting parts of the building had their roofs run up separately into cones and spirelets with a picturesque effect. It is curious that while the French never gave up the high roof, in England, where the climate is wetter, the tendency was to sink the roof in many of the greater buildings; at Longleat, Burghley, the Bodleian

building, Wollaton, Hardwick and, I think, Audley End the roof does not appear above the parapet. The mullioned and transomed window was continued in France throughout this period, but it never expanded into the wide window of several lights characteristic of many an old English manor, and seldom if ever exceeded two lights. Consequently many of the rooms in an old French château are but imperfectly lit.

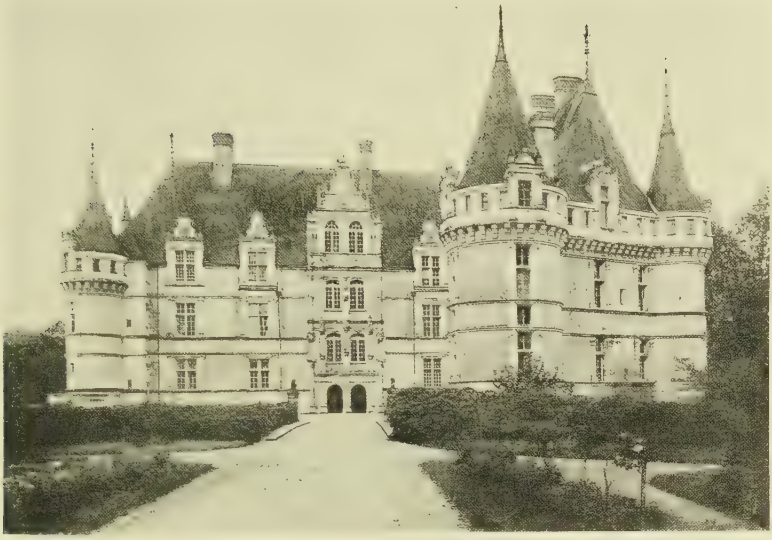
The mullioned window.

Chenonceaux was built between 1515 and 1524 by Thomas Bohier, general of the finances of Normandy, one of the group of financial officers above mentioned. It was originally a square building standing on the piers of an old mill on the river Cher, which still rushes swiftly through the arches. At each corner is a round tourelle with a conical roof. On one projecting pier room is found for a chapel, and on another for the library. A straight passage with a Gothic vault cuts the house in two, leading from the front door to the back of the house. Hence it is continued on the well-known bridge, with a gallery on it across the river to the opposite bank.

Chenonceaux.

Azay-le-Rideau, another of the Touraine châteaux, was built between 1516 and 1524 by Gilles Berthelot, one of the group of financiers. He was involved in the ruin caused by the rapacity of Louise of Savoy, for which Semblançay and Ponchet had been hanged. His initials and those of his wife Philippe Libès, G. and P., appear in many parts of the interior. The plan is unusual, like the letter L, perhaps given by the foundations of the preceding castle, which was pulled down by the father of Gilles. Although there is no pretence of defensive architecture, there are round bastions at the corners with conical roofs. The walls are plain and the whole has an air of refinement and restraint. The only decorated part is the projecting and gabled frontispiece, which contains the entrance, and behind it the main staircase. The latter is very prettily managed, with straight flights round a central wall, and the sloping ceilings are panelled with vaulted compartments, some of

Azay-le-Rideau.



AZAY-LE-RIDEAU.

CHENONCEAUX.

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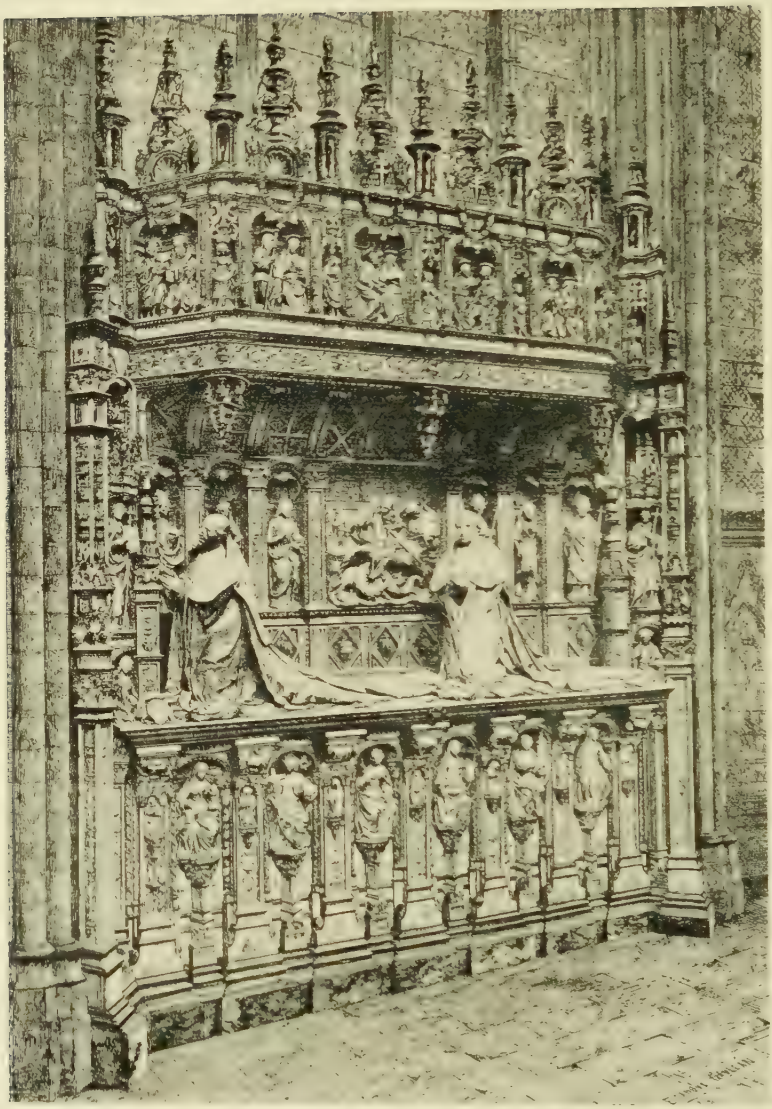

[*From "The Building News."*

ROUEN—TOMB OF CARDINAL D'AMBOISE.

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which are filled with heads in low relief. Some of these are restorations.

Bourg-théroulde.

The Hôtel de BOURGTHÉROULDE at Rouen is a Gothic building of the end of the fifteenth century, to which a Renaissance wing was added, consisting of a range of wide arches, with arabesque panels on the piers, between two friezes of sculpture. That above contains the "trionfi" of Petrarch, that below a representation of the pageant of the Field of the Cloth of Gold and the meeting of the two monarchs.

Orleans.

ORLEANS has an old hôtel de ville and several other houses of the late Flamboyant and Renaissance periods. Troyes, Angers, Caen and Rouen still abound in old houses, many of them in half-timber, though their number has sadly diminished during the last half-century.

The master-mason architect.

In the buildings of the French Renaissance thus far the Professional architect of later and modern times has not yet appeared. The Le Bretons, the Sourdeaus, the Nepvens and the Chambiges were all master-masons of the mediaeval type; men who lived on the work saw to its execution, and in most cases worked themselves on the building. The Giusti produced their work independently of any superintending architect. The natives showed great adaptability in learning the new style. In 1520 we find Roland le Roux, a French master-mason, engaged on the monument of Cardinal Georges d'Amboise in Rouen Cathedral. The Le Roux were a family of master-masons or architects, who had worked in succession on the west front of the cathedral. To Roland the design of the tomb is due, and we have the names of the artists employed on it, *habiles ouvriers*, who are all Frenchmen. The tomb is well known as one of the most sumptuous pieces of French Renaissance architecture. On a basement which has a front of niches and figures kneel the two cardinals, uncle and nephew. On the background, between niches with figures, is a panel with S. George and the dragon, and above is a canopy with sculptured panels and pinnacles. As M. Palustre

Tomb of Cardinal d'Amboise.

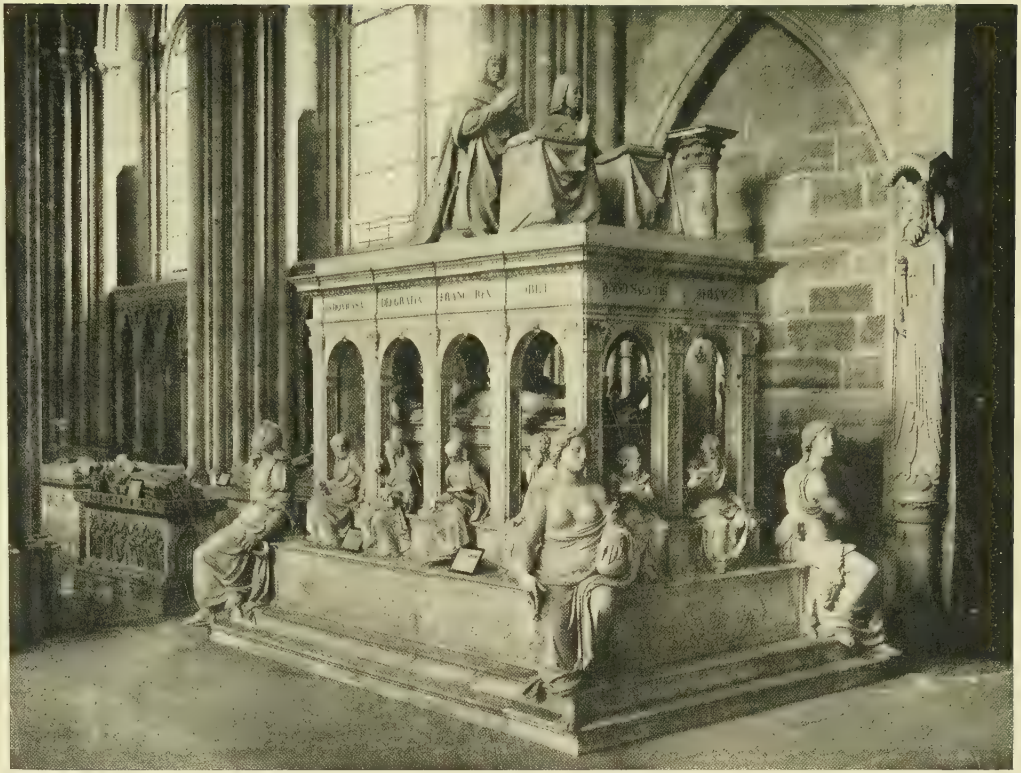
says, the amount of carving is almost terrifying. The readiness with which the native artists caught and adopted the new style is very remarkable.

Tomb of Louis XII.

The great work of Jean Juste, one of the Giusti family, is the tomb erected by Francis I. to his predecessor, Louis XII., at S. Denis. A sarcophagus, on which lie the naked figures of the king and queen, is enclosed within an arcade, carrying a tester on which kneel figures of Louis XII. and Anne. In the arches are small figures of the apostles, and at the four corners of the Podium are larger figures of the chief virtues. The tomb is fine, though the little figures of the apostles crowd it ; the kneeling figures on the top are excellent.

Freedom of Early French Renaissance.

All the work of the Early French Renaissance, with which we have so far been concerned, is free and unconventional, like the work of the preceding ages. It was intelligible to the people, and had almost become vernacular. But the time was come for an end to liberty in design. Translations were published by Jean Martin of the works of Alberti and Serlio, and lastly in 1547 of Vitruvius, which became the architects' oracle ; and thenceforth, instead of the free expression of the artist's mind, unfettered by rule and dogma, we have the architecture of the Book.



S. DENIS—TOMB OF LOUIS XII.

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S. DENIS—MONUMENT OF FRANCIS I.

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CHAPTER XXXIII

THE RENAISSANCE IN FRANCE (*continued*)
THE PROFESSIONAL ARCHITECT

BOTH in England and France the master-mason passed into the Professional architect almost imperceptibly. For some time the two systems worked together. Philibert de l'Orme, with whom the new era begins, speaks slightingly of the old method. He says: "Those who mean to build ask advice perhaps of a master-mason, or a master-carpenter, as is usual, or even of some painter"—meaning no doubt his rival Primaticcio,—"or of some notary or others, who say they are experts, but perhaps have no better judgment or counsel than those who ask them. And what is worse, they depend on a single plan of the work, drawn by the said master-mason or some one else, who follows his own intention, so that the work is pretty well left to chance."

The Professional architect.

It would seem from this that the master-masons who built Chambord, Azay-le-Rideau, Chenonceaux and Blois had a very free hand in the design, and that they practically acted as the architect.

Philibert was born at Lyons about 1515, the son of a master-builder. He studied at Rome, whence he was brought to France by the du Bellays, who introduced him at court and employed him to build the château of S. Maur des Fosses, which perished at the Revolution. He does not seem to have been employed by Francis I., but he was made royal architect by Henri II. He died in 1570, ten years before Palladio.

Philibert de l'Orme.

In 1567 he published his great volume on *L'Architecture*, dedicated to the Queen-Mother, Catherine de' Medici, which by three years preceded Palladio's *L' Architettura*, which was not published at Venice till 1570. In his book he ventures to criticize Vitruvius, whom he finds confused and ill-arranged, and he even proposes a new order : " ancient architects were allowed to invent new columns ; what is there to prevent us French from inventing some, and calling them French, like those I invented at Villers-Cotterets ? "

His book.

His new French order consisted in surrounding the shaft at intervals, where the joints occur, with a kind of wreath. He used it at the Tuileries. It is clear that, though an apostle of the Renaissance, Philibert still retained the freedom of the mediaeval architect, to some extent.

The French order.

He was employed to make the monument of Francis I. at S. Denis, which is a piece of correct formal architecture, more orthodox. but without the life and imagination of Jean Justes' monument of Louis XII. (Plate XCVII.).

Till 1553 Philibert was engaged at Anet for Diane de Poitiers, mistress of Henri II., who inherited it from her husband Louis de Brézé. It was a large building surrounding three courts, of which only part remains. It is entered by an imposing gateway, of which Philibert gives an illustration in his book ; in a lunette over the arch was Benvenuto Cellini's bronze figure of Diana with her arm round the neck of a stag, which is now in the Louvre, and is represented at Anet by a copy. On the top is the statue of a stag with hounds. The stag struck the hour with its foot on a bell and the hounds bayed. In one side court was Jean Goujon's famous fountain of Diana, now in the Louvre, with the kind of urn or sarcophagus on which it rested. The entrance to the main building from the *Cour d'honneur* was by a tower of three orders, now re-erected at the École des Beaux Arts, which anticipates and perhaps gave the suggestion for those at Merton and Wadham in Oxford.

Anet.

In 1556 de l'Orme built for Diane de Poitiers the bridge at Chenonceaux, which crosses the Cher from the

[*Photo, Giraudon.*

ANET—TOWER OF THE THREE ORDERS.

To face page 304.

[*Photo, Giraudon.*

ANET—FOUNTAIN OF DIANA (JEAN GOUJON).

To face page 305.

château, and on this the gallery was added when the Queen-Mother had taken possession.

In 1564 Catherine determined to build a new palace near the Louvre, and employed Philibert to design one on the site of some tile-works, whence the building gets its name of the TUILERIES. De l'Orme's plan was for an immense building with seven courts, but only the central part of the front block was built. He chose, he says, the Ionic order, the feminine order, because he was building for the Queen.

The Tuileries.

JEAN BULLANT, a contemporary of de l'Orme, was largely employed by Anne, Constable de Montmorency. The Constable was building the château of Écouen, where Jean Goujon seems to have been in charge, and to have designed the chapel fittings, which are now at Chantilly. But in 1550 Bullant was employed to add the three frontispieces to the entrances, of which two are in the court and one faces to the outside. They are not particularly remarkable except as an early, perhaps the first, instance in France of the "colossal" order, that is, columns running up through two storeys instead of being confined to one. After the death of Henri II. the Constable was in disgrace, and retired to the château of Chantilly, where he employed Bullant to build the block known as the châtelet, in the design of which is a confusion of two ideas. There is an order of pilasters designed to carry a regular entablature at the level of the eaves. But there had to be two storeys, and the wall is not high enough for them. Consequently the upper windows have to break through the entablature and rise into dormers in the roof. The short sections of the entablature left between them are absurd and unmeaning, and they are balanced each on a pilaster, which has equally lost all relation to the plan and construction.

Bullant. Écouen.

Chantilly.

On the death of Henri II. in 1559, his widow, Catherine de' Medici, resolved to build a mortuary chapel to contain the tombs of the Valois dynasty. It was to be a rotunda adjoining the Abbey Church of S. Denis. The architect is uncertain. De l'Orme,

The Valois chapel.

as the favourite architect of Diane de Poitiers, was for the moment in disgrace, and Primaticcio had replaced him. Palustre, however, who will not allow any Italian influence on French architecture, will have it that the building was begun by Lescot, who was followed by Bullant, that it stood still from 1572 to 1582, and was then continued up to the starting of the dome by du Cerceau. The chapel was neglected by the Bourbon dynasty and was pulled down in 1719. I have above pointed out the resemblance between this chapel and the Radcliffe Library at Oxford, and suggested that Gibbs may have seen the plans of the Valois chapel, though it had disappeared in his time.

The Radcliffe Library.

The Louvre in the time of Louis XII. was an ancient castle, a square fortress enclosing a courtyard 165 ft. by 145 ft. Towards one end was a donjon tower 49 ft. in diameter and 96 ft. high, which overtopped the building. In 1527 this tower, which was a great encumbrance, was removed by Francis I., and he resolved to remodel the whole building. Pierre Lescot was appointed architect with full powers. He came of a legal family, but, as Palustre says, he deserted Parliament for the Arts, and Ronsard in an ode celebrates his early taste for drawing while at school. He was known at Court as the Sieur de Clagny, from an estate he inherited. Lescot worked a good deal with Goujon, on a jubé in the church of S. Germain l'Auxerrois, and on the Hôtel de Ligneris, now the Musée Carnavalet. After the death of Francis, Lescot's appointment was confirmed by Henri II. and his two successors.

The Louvre.

Pierre Lescot.

His work at the Louvre is confined to the south and west sides of what had been the old castle, which only occupied a fourth part of the present court of the *Vieux Louvre*. On the south, towards the river, it is masked by a later building of Perrault ; it is only in the court that we have his design. It is a beautiful building, in a fully developed Renaissance style ; delicate in its details, and the reliefs slight, better suited perhaps for the smaller court in which it was at first intended they should appear. When the court was enlarged to four times its extent

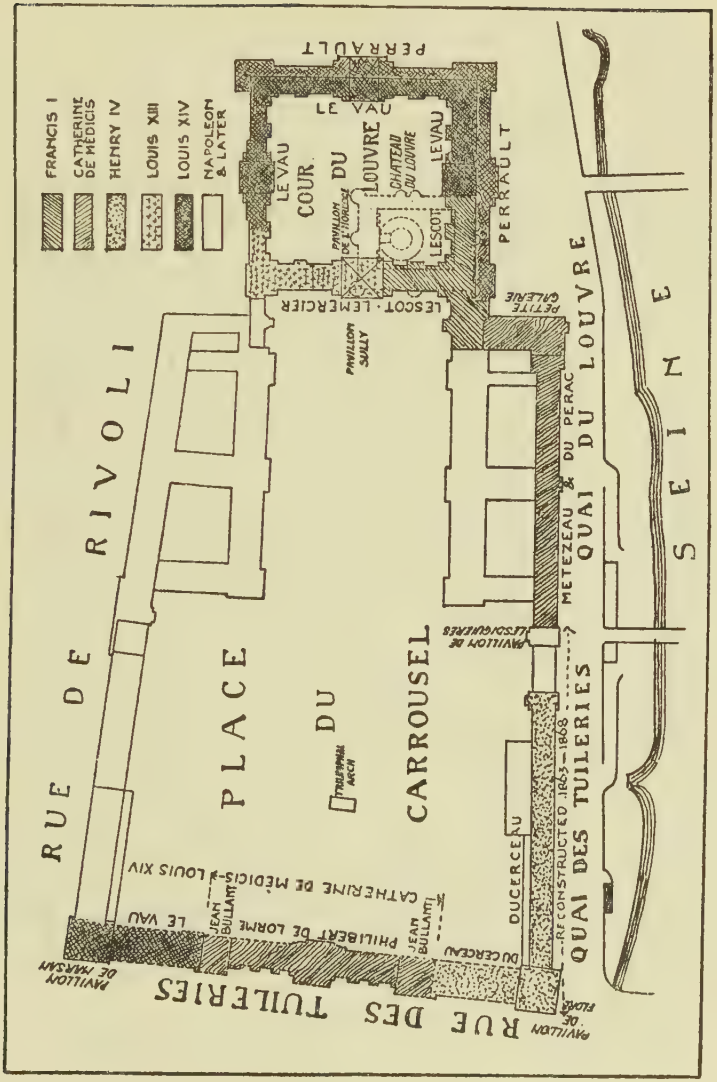


FIG. 58.—Plan of Louvre.

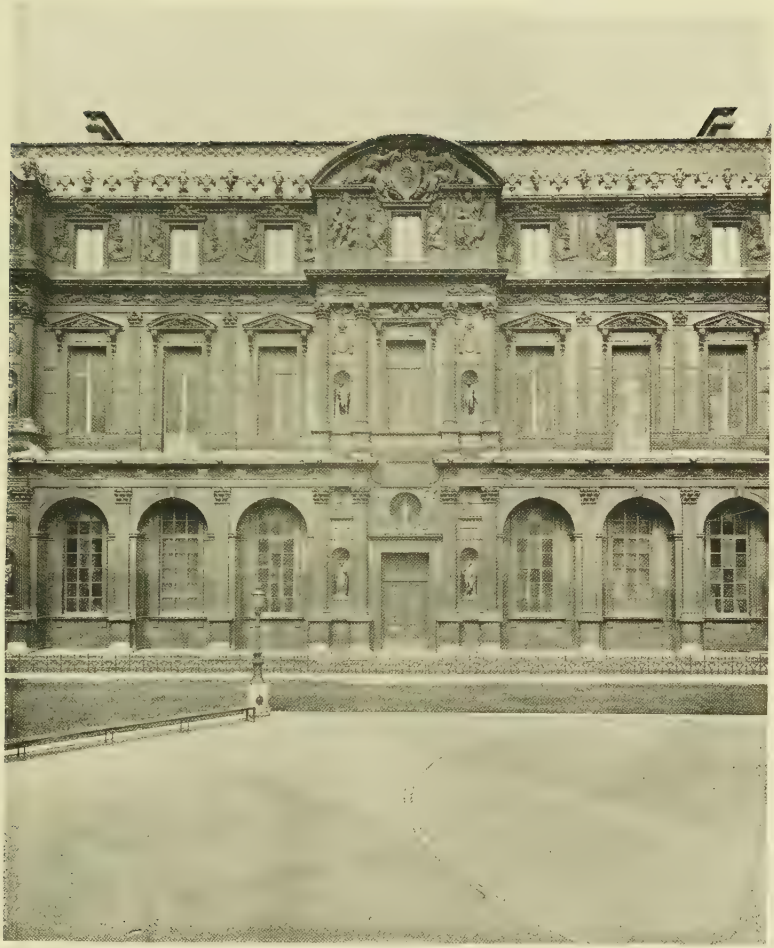
Lescot's design was followed in some respects, but his pedimented attic and high roof disappears and is replaced by a colonnaded attic hiding the roof, and of a greater height than Lescot's building; and the court as a whole is not interesting. Lescot's building must be studied alone. The outside is enriched with Goujon's fine sculpture, and the south wing on the ground floor contains the Salle des Caryatides, named from four beautiful figures by Goujon that carry a gallery over the entrance doorway.

Jean Goujon.

We do not know exactly when or where JEAN GOUJON was born. He is said to have been apprenticed to Quesnel at Rouen, and to have worked on the monument of Louis de Brézé in the cathedral. It is doubtful whether he ever got to Italy to study. He was a Protestant, which may have prevented him. He is known to have been condemned, as a penance for having attended a Lutheran sermon, to walk through the streets in his shirt in 1542, and to attend the burning of the preacher. His employment at Écouen by de Montmorency has been mentioned already. In 1547 he contributed to Martin's translation of Vitruvius the woodcut illustrations and some annotations.

In 1550 he finished the Fontaine des Innocents, and contracted for the Caryatides at the Louvre, and about 1553 he was employed under de l'Orme at Anet on the figures of Fame in the chapel and the famous fountain of Diana. In 1559 he gives a receipt to Lescot for the sculpture at the Louvre. But times were growing dangerous for men of his faith. There was the Conjuration d'Amboise in 1560, with the wholesale massacre of Huguenots; in 1562 the massacre of Vassy, and after that we lose sight of Goujon. According to one account he perished on S. Bartholomew's Day, being shot while working on a scaffold at his sculpture. Lately it has been discovered that he escaped to Italy in 1562, and died at Bologna before 1568.

The FONTAINE DES INNOCENTS, now in a square near les Halles, was first built against the wall of the church of the Innocents, with two arches on the free side, and



[*Photo, Giraudon.*

THE LOUVRE—LESCOT'S BUILDING.

To face page 308

[Photo. N.

FONTAINE DES INNOCENTS, PARIS.

To face page 309.

a single arch at each end. It was taken down and rebuilt in its present square form in 1785. The charming figures of the nymphs between the pilasters are well known. Goujon's female figures have a certain peculiar dainty French grace about them that makes them in their way irresistible.

Fontaine des Innocents.

The enlargement of the Louvre to four times its old size was begun by Lemercier, who continued Lescot's building along the west side and built a return wing half-way along the north, whence it was continued by le Vau. In 1635 he built the church of L'Oratoire in Paris, and began the Sorbonne.

Lemercier.

The family of DU CERCEAU settled at Orleans, where they hung the sign of a hoop over the door, and added *du Cerceau* to their family name of Androuet. Jacques du Cerceau is famous as an engraver, and though he had the title of *Architecte du Roi*, no building is known to be by him. M. Destailleur thinks his title was "more honourable than real, and was confined to enabling him to touch a pension". As an engraver his output was enormous. His most important work is *Les plus excellens bastiments de France*, which was commissioned by Henri II. It was to have consisted of three volumes, the first to contain buildings in Paris, the second, royal palaces and buildings, the third, other most sumptuous private buildings in the kingodm. It was a work of immense industry, involving expense in travel and drawing, and while he was engaged the wars of religion broke out. He was a Huguenot like Goujon and Palissy, his brother artists, and he seems to have lost his property and fallen into trouble. He took refuge at Montaigu with Renée, daughter of Louis XII., and widow of the Duke of Ferrara, who was inclined towards the reformed doctrines. He writes that he has no means to pursue his task. "My will", he says to Charles IX., who asked how the work was getting on, "is nothing diminished, but the means are wanting, without your Majesty's help." In 1576 he complains to Catherine, the Queen-Mother, that the troubles of the time prevented him from visiting the

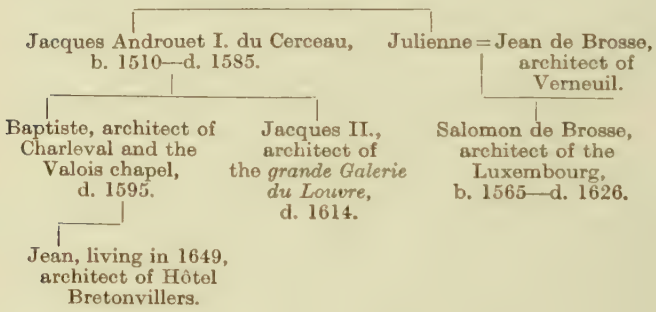
Du Cerceau.

Du Cerceau's book.

châteaux and houses she wished him to illustrate. In that year, however, he published his second volume, and three years later the third. The first volume never appeared at all. He died in 1585, leaving two sons, of whom Baptiste was architect of Charleval, a great château begun by Charles IX. and then abandoned, the Pont Neuf, and the Valois chapel up to the point where the work was suspended. Like his father he was a Protestant, his house was sacked, and he had to give up his office as architect to the king. The younger son, Jacques II., was architect of the Grand Gallery of the Louvre. By the marriage of the sister of Jacques Androuet I. the family was connected with that of de Brosse, also architects, and apparently like the du Cerceaus of the reformed faith.

Du Cerceau and de Brosse.

This is the pedigree of their families :


Jacques Androuet I. du Cerceau, b. 1510—d. 1585.
Julienne = Jean de Brosse, architect of Verneuil.
Baptiste, architect of Charleval and the Valois chapel, d. 1595.
Jacques II., architect of the grande Galerie du Louvre, d. 1614.
Salomon de Brosse, architect of the Luxembourg, b. 1565—d. 1626.
Jean, living in 1649, architect of Hôtel Bretonvillers.

[*Photo, Giraudon.*

TWO FIGURES—FONTAINE DES INNOCENTS, PARIS.

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CHAPTER XXXIV

THE LATER RENAISSANCE IN FRANCE

THE closing years of the Valois dynasty, troubled by wars and stained with murder and assassination, had been unfavourable to building: nor were things much better in the early part of the reign of Henri IV. But after the settlement of the kingdom by the Edict of Nantes, which secured toleration for the Huguenots, and the peace of Vervins in 1598, the king turned his attention to the Louvre. A gallery had been begun from Lescot's building westward, parallel to the river, and it was now determined to carry it all the way to the Tuileries, so as to unite the two palaces. This was done by Jacques II. du Cerceau. His front to the river has been rebuilt and altered, but it is reproduced on the opposite or north side of the court and may be studied there. It is extremely successful. It is two storeys high, divided by pairs of pilasters at regular intervals with windows between them. Every alternate window with the pair of columns on each side is surmounted by a pediment, triangular and arched alternately. The window cuts up through the entablature, leaving it complete over the pair of columns on each hand. It does not therefore offend like that at the châtelet of Chantilly. The pilasters of course carry nothing, and the pediments have nothing behind them, but simply stand against and form part of the parapet. The whole design therefore is "pictorial" architecture, but it has much grace and beauty (Fig. 59).

Grande Galerie du Louvre.

Preparation was made for a similar gallery to connect the two palaces on the north side of the court, but this was reserved for Napoleon III.

The buildings of Henri IV., unlike those of his extravagant Valois predecessors, were designed for useful purposes. Instead of country châteaux and hunting-boxes he set to work to improve Paris. Also, with hardly an exception, his artists were Frenchmen. He tried to form a school of French workmen, whose influence should penetrate all over the country. He tried

Buildings of Henri IV.

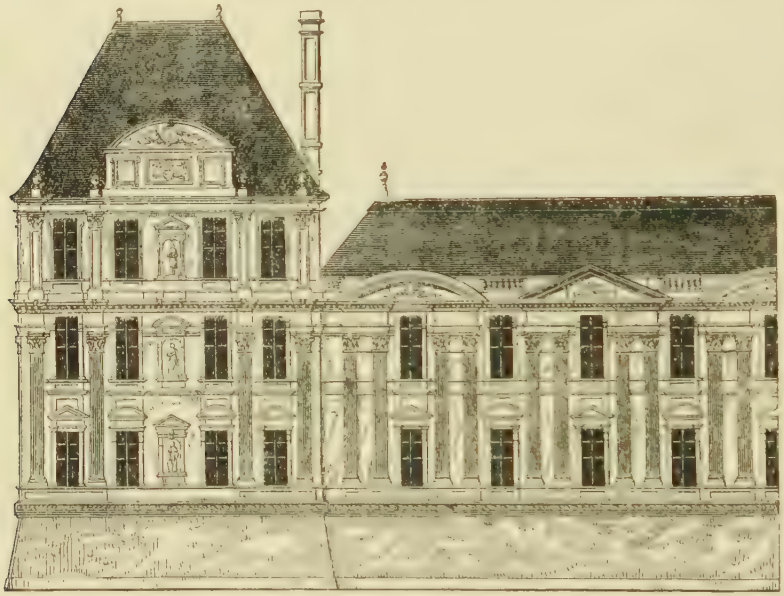

Fig. 59.—Louvre: Grande Galerie.

also to open up some of the close, filthy and congested parts of Paris by forming squares. The Place Royale, now the Place des Vosges, which he built north of the rue S. Antoine, was the first open space formed in the city, and except the Place de la Grève in front of the hôtel de ville it was the only one. It is, I imagine, the first instance either in France or England of the "Square, Piazza or Place", regularly laid out round a garden and surrounded by contiguous houses. The

Place Royale.

"Piazza" of Covent Garden was a similar adventure. The Place Royale is very simply and sensibly designed, with an arcaded ground floor, and the upper storeys in a light coloured brick. There are no "orders". The whole is quite plain, but very attractive from its simplicity.

Fontainebleau.

At Fontainebleau Henri IV. made great additions. He built the *Galerie des Cerfs*, with that of Diane above it, and a large court of offices in a simple style of brick with stone dressings. He pulled down the oval guard-room, which gave its name to the *Cour de l'Ovale*, and built instead the Pavilion, or triumphal arch, known as the *Baptistero*, because he had his son, the future Louis XIII., baptized under it.

Orleans Cathedral.

In 1601, in order to ingratiate himself with the Catholics, whose religion he had embraced, he began to rebuild the cathedral of ORLEANS; which had been wrecked by the Huguenots. The work was in the Gothic style, and continued in the same style by his three successors. But Gothic architecture was dying, or dead, and the building is in a bastard style, which got worse and worse as it proceeded. The west front, which was not built till 1726 by the elder Gabriel, is the worst of all; a miserable expensive structure in the manner of what we know as "Carpenter's Gothic", at its very lowest depth of abasement.

Lemercier.

Lemercier has been already mentioned as having enlarged the court of the Louvre to four times its original dimensions, and having continued Lescot's building part of the way round the west and north sides. His great patron was Richelieu, who seems to have employed him on all his works.

Palais Royal.

Lemercier built for him the Palais Cardinal in Paris, which, under the name of Palais Royal, Richelieu gave to the royal family. But this was nothing to the vast palace Lemercier built at Richelieu,

Richelieu.

the Cardinal's ancestral home. It had courts within courts, spacious enough not only for the Cardinal's own great retinue, but intended also to receive royalty and all its suite; but, vast as it was, the accommodation was pronounced insufficient. There-

fore outside the gates was built a town: it was walled, and had a parish church with an endowment, and was built four square with monumental gateways. Perelle's engraving shows the palace a two-storeyed building with an attic in the roof; there were pavilions at the corners with high roofs, and there do not seem to have been any Classic "orders". It is only from Perelle's engraving that we know anything of it, for the palace is gone, leaving only a memory. The town, according to Mr. Ward, still exists in a sleepy state, and is all that has survived to speak of the great Cardinal's splendour.

In 1635 Lemercier built the church of the SORBONNE for the theological faculty of the University of Paris. It is cruciform, with a front at the west end, and another with a portico on the north side to a court of the college. The central dome is carried up on a drum which runs up through the high Mansard roof, and cuts against it, especially at the sides, rather awkwardly. The architect was faced by the insoluble difficulty of making the same dome look well both outside and in. His architecture inside the drum of the cupola has no relation to that without. The two colonnades, that inside and that outside, are at quite different levels; but the same window appears in each, and its head has to be very awkwardly splayed down from the outside to the inside. The walls of the drum rise to the level of the crown of the true cupola, that inside, but as the colonnade outside does not rise quite so high, they are partly covered by the outside dome of timber and lead.

Sorbonne.

In 1653 Lemercier began the great church of S. Roch in the rue S. Honoré, but died in 1654 before it was finished. It is significant as much of the corruption of the age as of Lemercier's integrity that he never took bribes from contractors, and died a poor man. One of his last works was to finish the church of the Val de Grace for Anne of Austria after she had taken it out of the hands of François Mansart.

FRANÇOIS MANSART, one of the greatest names in French architecture, was born in 1598. He does not appear to have studied in Rome, and is said to have

[*Photo, Giraudon.*

THE SORBONNE, PARIS.

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worked under Salomon de Brosse. His first work, the

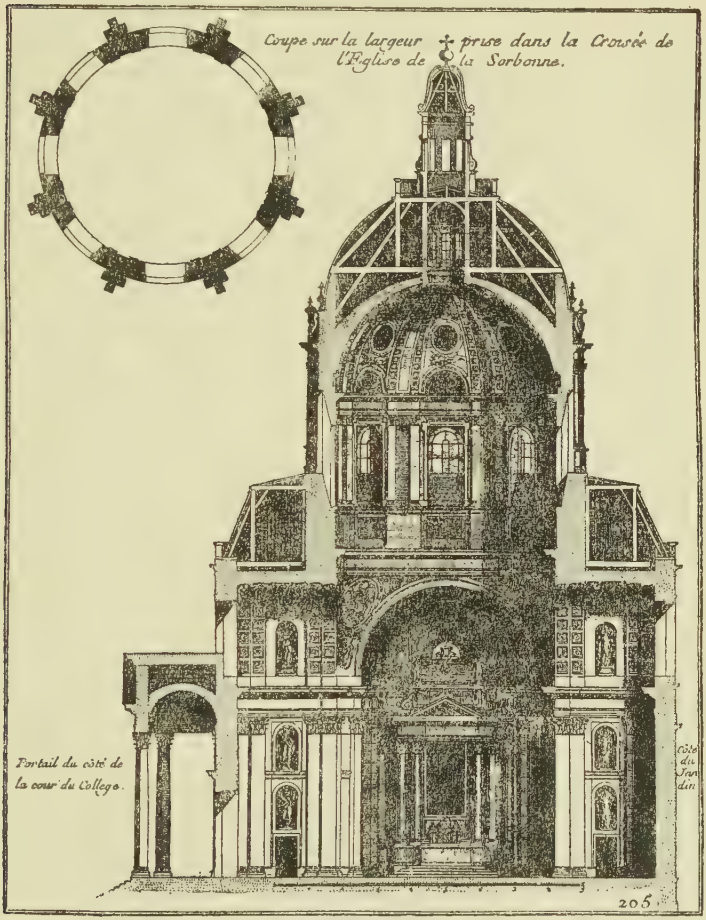

Fig. 60.—The Sorbonne.

façade of the church of the Feuillants, has been destroyed, but his church of the Visitation of S. Marie in

the rue S. Antoine remains. It is a round building with a dome, surrounded by chapels which are ingeniously planned. The floor of the central space, which is 42 ft. in diameter, is carried in the basement by an immense round pier from which an annular vault spreads out to the side walls. The details of the interior are rather coarse and uninteresting.

François Mansart.

In 1635 he was engaged by Gaston, Duke of Orleans, the profligate brother of Louis XIII., to rebuild the château of Blois in the new, and now perfected, style of the Renaissance. He began with the west side of the court with the arcades of Duke Charles, the prisoner of Agincourt, which he had built in 1440 on his return from his twenty-five years' captivity in England. These were pulled down. The buildings of Louis XII. and Francis I. with the famous staircase were to follow, but fortunately the spoiler's hand was stayed, and only the west side of the château was rebuilt. Mansart's building is in its way a masterpiece of design. It is simple and yet rich. Mansart has avoided the "colossal" order, running through more than one storey. There are no balustrades, no breaks in the entablatures; everything is simple, refined and dignified. Only in the middle of the front over the entrance is there a slight break forward with columns and a pediment. The back of the building is equally severe and dignified. Both at front and back, the high roof unbroken by dormers gives simplicity and dignity.

Blois.

In 1645 Anne of Austria, widow of Louis XIII., founded the nunnery of Val de Grace as a thankoffering for the birth of Louis XIV., and she employed François Mansart as architect. Mansart was the most fastidious of architects; no sooner had he finished a building than he thought of something better and wanted to alter it, not always to the convenience of his employer. He was consulted about the completion of the Louvre, and made several designs; but when Colbert told him he must settle on one of them, which should be shown to the king, and that he must keep to it, he said he could not bind himself in that way,

François Mansart: his fastidious taste.

BLOIS—CHATEAU: MANSART'S BUILDING.

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and threw up the commission. At Maisons, near Paris, which he built for René de Longueil in 1642, he made it a condition that he should have a free hand and be allowed to alter the work as he liked, and in fact he did pull down and rebuild a part at an expense to his employer of 100,000 francs. Queen Anne took alarm, dismissed Mansart from the direction of her work at the Val-de-Grâce, and employed Lemercier to continue Mansart's design. He raised the building to the springing of the dome, whence after his death it was finished by le Muet. The dome is larger in proportion than that of the Sorbonne, being brought out into the aisle on a square structure, with a turret at each angle. The façade is very pleasing, with a well-managed projecting portico over the door.

Maisons.

Val-de-Grâce.

Mansart stands above his contemporaries, and in his work we have the French Renaissance at its best, still used with ease and liberty, and free from the rigid formation of the succeeding period.

The palace of the LUXEMBOURG was built by Salomon de Brosse as a dower-house for Marie de' Medici when her son Louis XIII. should marry. It has a fore-court with the main building at the back, lateral wings, and a screen wall to the street with a fine portico surmounted by an imposing superstructure. The palace was sumptuously finished, and it is said the glazing was set in cames of silver instead of lead. But all Marie's schemes fell through on the "Day of Dupes", and she fled to Brussels, and died at Cologne in 1642.

Luxembourg.

Salomon de Brosse's façade to the Gothic church of S. Gervais, behind the hôtel de ville, is an imposing, ponderous structure in three storeys of orders with a rather top-heavy curved pediment above. It is altogether columnar in style, rather a scaffolding of pillars, only relieved by a pediment over the door.

S. Gervais.

Le Vau was some years Mansart's junior. He was born in 1612 and lived till 1670. He was *Architecte au Roy*, and employed on many public buildings. In 1653 he built the sumptuous château of Vaux-le-Vicomte for the

unhappy Fouquet, near Melun. It is laid out on a magnificent scale, decorated within by le Brun, and the gardens planned in a superb manner by le Nôtre. Here was given the famous party in 1661, when 6000 guests came to meet King Louis XIV. and enjoy Fouquet's hospitality. It was an ill-fated gathering; glances observed between Fouquet and la Vallière are said to have sealed his fate, and the sight of what had been done at Vaux-le-Vicomte finally decided Louis to defy Colbert and build himself a palace on new ground, away from Paris, a decision which ended in Versailles. Vaux-le-Vicomte and its gardens and decorations are still maintained in all their primitive splendour by the present owner.

Colbert's great desire was to keep the king in Paris. In 1657 le Vau was employed to continue the imperfect front of the Tuileries by building the Pavillon de Marson, so that the palace reached from that pavilion to the Pavillon de Flore on the river, and so enclosed the court, although with a very broken and uneven line of structures. Le Vau next finished the incomplete north and south sides of the court of the Louvre, and began to build the east side. There remained to be done only the east front facing S. Germain l'Auxerrois. For this Le Vau's design did not satisfy Colbert, who took the advice of the body of Paris architects. They, as might have been expected, condemned it, and sent in designs of their own. Among these was an anonymous one by Claude Perrault, brother of Charles Perrault, Colbert's secretary. Claude was not an architect, but a doctor and a man of science. All these designs were sent to Poussin at Rome, that he might take the opinion of the Roman architects, and in particular of Bernini. The Italian architects promptly condemned them all and sent in designs of their own. The king next invited Bernini to come and give a design. Bernini was then at the height of his reputation, and his journey was like a royal progress: the king's own *maître d'hôtel* was sent to arrange for his comforts by the way.

The Tuileries.

The Louvre: the east front.

[Photo, Giraudon.

THE LOUVRE—PERRAULT'S EAST FRONT.

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Bernini produced a magnificent but impracticable scheme, involving pulling down the whole Louvre, sparing only the *grande galerie* leading to the Tuileries. But the Paris architects were resolved that under any circumstances the work should not go to a foreigner, and Bernini, disgusted with his treatment, took his plans home, retiring loaded with presents and pensions.

Bernini.

In fine, Colbert submitted for the king's choice two designs, that by his secretary's brother and that of le Vau. The king asked Colbert which he preferred, and Colbert, who wished for Perrault's design, knowing that whichever he named the king would choose the other, named le Vau's, on which, as he had intended, the king gave the commission to Perrault. Perrault showed by his work that he was no novice in the study of architecture. It displays much knowledge and originality, and it strikes such a different note from other contemporary architecture that it seems to belong to a different period. It was, however, finished in 1670. Everybody knows Perrault's east front; it has a plain lower storey and a kind of cryptoporticus above, set back behind a colonnade of coupled columns. There is a solid block at each end and another in the middle surmounted by a pediment. This central block, which should be the eye of the design, fails for want of some strongly marked feature, a window, or a great piece of sculpture to mark the centre, which seems rather empty. The Purists, and especially Blondel, objected to Perrault's coupled columns. Blondel said they savoured of Gothic, to which Perrault replied that they would be none the worse for that provided they were good.

Perrault's east front of Louvre.

On Mazarin's death in 1661, Louis XIV. surprised his court by announcing that there would be no more first ministers, and that he intended to rule personally. Everything in future was to be centred in him, and he soon showed that he was not without capacity to realize his intentions. Among other things he had not forgotten his idea of building himself an entirely new palace, away from Paris, where Colbert in vain tried to keep him.

Louis XIV.

At Versailles his father, Louis XIII., had built a small hunting-box, and here Louis determined to realize his idea, and to make it not only his palace, but the centre of his government. He respected his father's building, and employed le Vau to build round it so as to double its depth, and to throw out some wings in front. The old house of Louis XIII., therefore, still remains, and forms the inner part of the Cour de Marbre. Le Nôtre, who had laid out the grounds so successfully at Vaux-le-

Versailles.

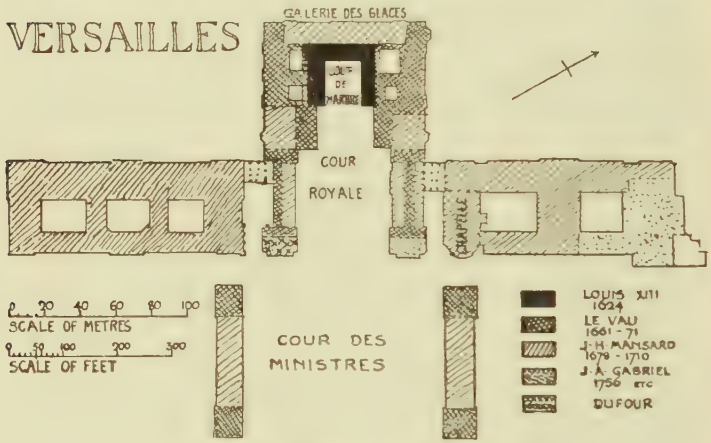

FIG. 61.

Vicomte, was set to work to plan those at Versailles on a still more magnificent scale. S. Simon, who seems to have hated the place, says that Versailles had no attractions: it was *le plus triste, et le plus ingrat de tous les lieux*. It had no view, no wood, no water, no soil, for it was all moving sand or marsh, and the air was bad. It pleased the king, he adds, to tyrannize over nature, and to subdue it by art and money.

In 1670 le Vau died, and on the recommendation of le Nôtre a young man, Jules Hardouin Mansart, was appointed architect. His real name was Hardouin, to which he added Mansart, for he claimed to be nephew of the

PLATE CVI.

[*Photo, X.*

GALERIE DES GLACES, VERSAILLES.

To face page 321.

great architect of that name. He began by filling in a recess left by le Vau towards the garden with the *Galerie des Glaces*, which was followed by great blocks of building right and left of le Vau's, to contain the several ministries. Other courts of offices and extensive stabling followed; the group of buildings measured 630 yards from end to end, and it is said accommodated 10,000 persons. For besides his palace and his ministries it was Louis's pleasure to gather round him his nobility. They were expected to come and live at court, and to bask in the rays of *le Roi Soleil*, leaving their family seats deserted, and their estates suffering all the evils of the absenteeism of the landlord, who spent in extravagance and luxury at Paris what should have been spent among his dependents. For these magnates, so far as was possible, provision was made in the palace. They had to put up with what rooms they could get. S. Simon describes the sort of dog-holes these great nobles, who had splendid châteaux of their own, lived in at Versailles; small rooms crowded together, reached sometimes through one another, only lit perhaps by a borrowed light from another room, or from a staircase. Yet for these cramped uncomfortable quarters the courtiers would scramble, contented if they might only live under the same roof with their sovereign lord and master.

Jules Hardouin Mansart.

The nobles in Paris.

Crowded quarters.

Mansart's garden front is fortunately broken by the projection of the block containing the Cour de Marbre, which throws the side wings a long way back, so that one or both are generally hidden, and the whole range is only visible from a point of view in the centre. The projecting part is practically le Vau's architecture, for Mansart in the *Galerie des Glaces* has followed the design of the side wings between which it is placed. The design is pleasing: it is three storeys high, the lowest plain and rusticated; the next, the most important, has a fine range of round-headed windows between columns, and pilasters carrying a complete entablature. The attic is plain and unobtrusive. Variety is given by breaking out bays at intervals.

Garden front.

The chapel was not begun till 1699, and was finished after Mansart's death in 1708 by his brother-in-law, Robert de Cotte. It was consecrated in 1710. Its lofty proportion, domineering over the palace, is due to the interior arrangement. The king's gallery is level with the first floor of the palace, and the interior is really designed to be seen and should be floored at that level. The lower storey, where the service is conducted, regarded from that point of view, is superfluous. This does not affect the outside of the chapel, which is good and effective.

The chapel.

There are no high roofs, except on the outer side towards the entrance. S. Simon misses them, and says the building looks as if it had been gutted by a fire. Of the whole design he says the fine and the mean are jumbled together, and the whole was built piecemeal without a general plan. The royal apartments are most inconvenient, and only look out into obscure, enclosed, and stinking little courts. Finally, " among all these saloons, attached to one another, there is neither a hall for comédie, nor one for a banquet, nor one for a ball ".

S. Simon on Versailles.

The splendours and bustle of Versailles, it would seem, sometimes palled upon the senses of their royal creator. Louis longed, or thought he longed, for a " lodge in some vast wilderness ", where he could retire now and then from Wednesday to Saturday, to drop state and lead the simple life. He decided he would build a hermitage in the valley of Marly, a place, according to S. Simon, of snakes, of garbage, of frogs and toads ; such was the king's proud delight in making Nature obedient to him. The hermitage, however, was built and grew into a palace under Mansart's hands ; le Nôtre was sent for to turn the valley into a garden. Earth had to be brought ; great trees were moved to the place from Compiègne and planted, only to die and be replaced by others. A lake or canal was formed, lined on either bank with a row of small houses for ministers and courtiers, like satellites round their sun. Le Brun came to decorate the principal villa, and there were statues,

Marly.

GARDEN FRONT, THE PALACE, VERSAILLES.

ENTRANCE FRONT, THE PALACE, VERSAILLES.

From *The Builder*, August 26, 1899, by permission.

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[N.D. Photo.

LES INVALIDES, PARIS.

To face page 323.

aqueducts and precious marbles. Marly was neglected by Louis XVI., and was swept away at the Revolution. It is said to have cost 13,200,000 livres.

In 1670 Louis founded the great hospital *Les Invalides* (Plate CVIII.) for worn-out or wounded soldiers, which, with its dependencies and the first basilican church, covers an area of thirty acres. To this, at the end of the basilican church, Mansart added the second church, with the well-known dome. It occupies a square of 150 ft., with enormously massive piers, chapels and substructures surrounding the domed space 80 ft. in diameter. The dome is triple: the two lower in masonry, the upper in timber (Fig. 62). The lowest dome has a very large opening into the second dome, which is well lighted in the space between the two. The timber dome above carries a timber lantern. The building was finished in 1706. The whole effect is very noble, and the profile of the great dome is very happy. In the attic storey one certainly misses the central window, an omission caused by the unequal division of the drum, the great buttresses being grouped in pairs over the oblique sides of the octagon.

Les Invalides.

The estimate of the younger Mansart as an architect is affected by the suspicion that has been cast on the authenticity of his work. S. Simon says that Mansart and his brother-in-law de Cotte relied on a subordinate named l'Assurance, whom they kept dark, and that he was really the designer of the principal works that go by Mansart's name: that in fact his great works were designed by a "Ghost". His enormous practice no doubt required that Mansart should have a very large staff of highly skilled assistants; but this would not imply that the general conception and design of such a building, for instance, as the Invalides was not Mansart's, though in working it out he had the help of his staff. Mansart had done work in his earlier career of which he was unquestionably the author, as, for instance, the Hôtel de Clagny near Versailles, which has now disappeared; and there are buildings by l'Assurance himself after Mansart's death

Estimate of J. H. Mansart.

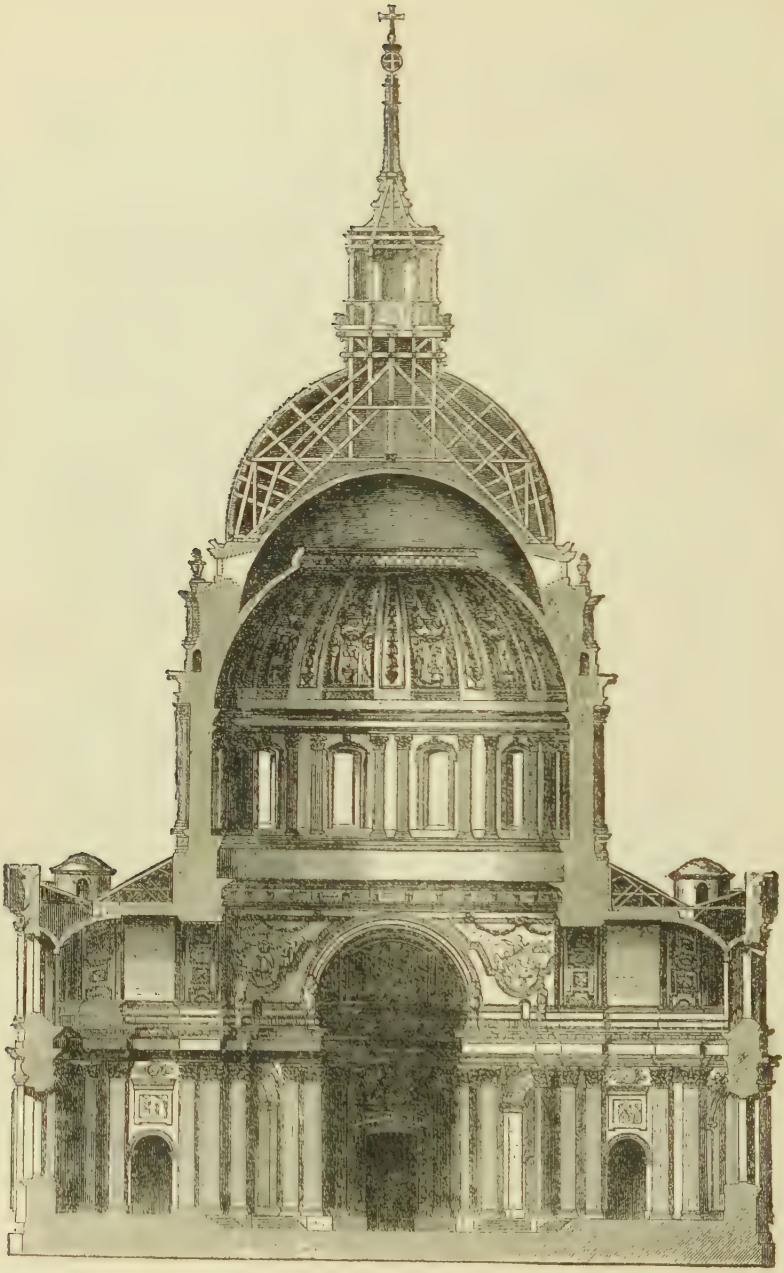

Fig. 62.—Les Invalides.

which show no remarkable ability, but are in fact commonplace.

S. Simon did not like Mansart; he was offended by his free and familiar manners, his easy communication with the king, to whom he had access not only on matters connected with his work, but on general subjects. At the same time S. Simon admits the rectitude of his professional conduct, and says Mansart did not abuse his position to injure others.

The later Renaissance buildings in France in domestic work show restraint and simplicity. The outsides of the houses become plain and even commonplace, and the use of the orders disappears, with obvious gain to the sincerity of the work. Decoration was reserved for the interior of the building. The illustrations of houses in Blondel's book show generally two storeys of plain windows, and if the orders are used they are confined to pilasters with a pediment to a door or a window. They are all very much alike, and they differ mainly in the interior planning. Of works aspiring to architectural importance may be mentioned the great stables at Chantilly, and the façade of the, till then, unfinished church of S. Sulpice at Paris. The façade is by Servandoni and is undoubtedly a fine piece of work, but it is injured by the two hideous circular stages added by other architects to the western towers.

Plain domestic building.

S. Sulpice.

The style Louis XV. belongs more to interior decoration than to architecture; with its broken curves, shells and shapes based on nothing in nature. The serious architecture done during this reign does not differ much from what preceded and followed. Besides Servandoni, the two Gabriels, father and son, did several fine works; the father, J. J. Gabriel, in 1726 built the west front of the cathedral of Orleans, which has been described already, in a style he did not understand, which will not redound to his reputation. Between 1717 and 1723 he built the noble bridge that crosses the Loire at Blois. To A. J. Gabriel, the son, we owe the original laying out

J. J. Gabriel.

A. J. Gabriel.

of the Place de la Concorde at Paris, after the peace of Aix-la-Chapelle. He also built the fine twin palaces that enclose it on the north side. They were built between 1761 and 1770 on strict Vitruvian lines. In 1763 Gabriel built the Petit Trianon at Versailles for Madame du Barri, a refined work and a gem of new Classic architecture.

In 1764 the first stone was laid of the church of S. Geneviève, now known as the PANTHEON, at Paris. The architect was Jacques Germain Soufflot of Lyons. It is a Greek cross with the addition of a portico. The great dome over the crossing has a diameter of 66 ft.; the four domes round it are less, and are kept flat. The windows do not show outside, being hidden by masking walls, like Wren's on his side aisles. The drum is surrounded by an evenly spaced colonnade with no buttresses as at S. Paul's and S. Peter's, breaking back to the dome, and in fact quite useless, a mere piece of pictorial architecture. The construction of the dome and its supports is very slight, and the piers had to be strengthened and enlarged in 1806. The arrangement of the interior is admirable and very ingeniously planned.

The Pantheon.

This building is the last of importance before the Revolution, which brought the arts to a standstill, and it closes the history of the Renaissance in France, which began at Gaillon and Fontainebleau, and which we have followed through the charming though irregular eclectic work of the later Valois princes to its final settlement on strict Vitruvian lines under Louis XIII. and his successors.

THE PANTHEON, PARIS.

To face page 326.

[*Photo, X.*

THE PANTHEON, PARIS.

To face page 327.

EPILOGUE

From the preceding account of European architecture it would appear, unless I have failed in the purpose with which I set out, that at different periods its progress has been guided by two different principles. On the one hand is the principle of self-growth and liberty of development, by which the art progressed from the fifth to the fifteenth century. On the other is that of the Renaissance, when we have the rule of authority, dogma and the book.

In the first case architecture grew up stage by stage from within. Every fresh step taken was based on that already existing and arose within the workshop, suggested by some new opportunity of convenience, some new material, some new social demand, or maybe some fresh direction of æsthetic sense. It is remarkable how these changes occurred, if not simultaneously, at any rate almost so, throughout Europe. Romanesque architecture, except in the East, where it took the parallel form of Byzantinesque, pervades all the countries of Western Europe. The Romanesque of Spain is like that of France, and that again like that of England, Italy, and Germany. From Romanesque in all these countries, some sooner, some later, the style passed to pointed architecture, in which it moved on from phase to phase until cut short by the Renaissance.

The principle of the Renaissance is the reverse of this. There is no question here of any growth from within. The elements of the style are given and imposed from without already complete.

The revival of ancient learning and the discovery of its supremacy over the literature of the day naturally led to

ancient architecture assuming its supremacy over the current Gothic art. In Italy first, the whole of the art from the fifth to the fifteenth century was pronounced barbarous, and was swept aside at one fell blow to make way for a revival of the art of the ancients. The humanist having taught the world to write like the Romans, it followed naturally that it would want to build like them. The discovery of Vitruvius and his publication seemed to lay the whole theory and practice of ancient architecture open to the new school of architects. Vitruvius became the architect's Bible, from which it was rank heresy to deviate.

An idolatry of the Classic orders was set up. Blondel, who was appointed the first director of the Academy of Architecture at Paris in 1761, recognizes an intrinsic authority in them. The Renaissance architects who preceded him — François Mansart, Lemercier and le Brosse in the mid-seventeenth century, and le Vau and the younger Mansart at the end of it—had all, in his opinion, taken liberties not authorized by the text-books and were therefore imperfect artists. He exalts the Classic orders into an almost divine inspiration. He maintains that the principles of the orders handed down from the ancients are fixed for all times ; they can be demonstrated mathematically, and are a law of nature, which can no more be violated than that of harmony in music. Of all the arts, he says, architecture is the least susceptible of variety. He imagines it to be reducible to an exact science, admitting no variation from its schedule of proportions and details.

Against this Claude Perrault, himself a Classic architect, protested vigorously. He argued that neither ancient nor modern authorities agreed among themselves nor with Vitruvius, and that the proportions given in the books were not based on any natural law ; that we really admired them from custom, and, consequently, that they may be and have been changed at pleasure. He continues : " It is hardly to be imagined what a superstitious reverence architects have for those works which we call *antique*, in which they admire everything, but principally

the mystery of the proportions which they are pleased to contemplate with profound respect". He compares the fancies of these idolaters of antiquity to the nonsense of Villalpandus, who will have it that the orders were divinely communicated to man, given miraculously to the architects of Solomon's Temple, from whom they passed to the Greeks, and from them to the Romans.

Blondel tells us that the only true architecture is that of the ancient mistress of the world, and from Vitruvius we learn the secret of how to produce it. The only safe rule is to follow the precepts of the master and his commentators, and to deviate is fatal.

To this Perrault objects that there would be no progress. Blondel replies that novelty is not wanted, progress is not called for. It will follow from this that we must take it that the last word in architecture was spoken in the reign of Augustus ; that the Corinthian capital is the final achievement of human genius, and that the proportions of the orders are settled for ever. The Canon of Architecture is closed, and we have only to work in obedience to its teaching. Architecture was reduced to its ultimate form by the Romans, and with this result the world must be satisfied. Human wit can go no further, and by these rules architecture will be governed to the end of time.

This reduces architecture to stagnation, and against this the restless spirit of modern times of course rebelled. In Italy men got tired of the cold Palladian régime, and took refuge in the licence of the Baroco. North of the Alps it led ultimately to the Gothic revival. But the Gothic revivalists brought with them the lessons they had learned from the Classic school. Architecture, according to Blondel, is archæology pure and simple, and the Gothic revivalists brought much of it with them. The rigid formulas of the neo-Classic school were ridiculed by the neo-Goth, but he in his turn promptly put himself into fetters of his own forging. We were told to analyse the old Gothic work which we took as our model, " as a German grammarian classes the powers of a preposition ; and under this absolute irrefragable authority we are to

begin to work, admitting not so much as an alteration in the depth of a cavetto or the breadth of a fillet ".

This is what Ruskin, a principal apostle of the new style, tells us, and what can we say but that we have here a master of Blondel's school preaching the old doctrines in a new garb.

The battle of the styles, Classic and Gothic, raged during the last century. Now the extremes have toned down. It can hardly be imagined that there are still Classic purists who would go the length of Blondel's conclusions, or men who would rival the furore of the neo-Goths of the last century. But the revival of this style or that is not for us. We are faced with the revival of Art itself, which is a very different thing. Let us have done with consideration of styles, and turn our attention to this main object. If we succeed, the matter of style will settle itself.

There are, in fact, only two styles of architecture which have been explained and contrasted in these pages —that of freedom and common sense on one hand, that of authority and dogma on the other.

These are the two methods open to us, the BOND and the FREE, and it depends on our choice what the future history of our art will be.

T. G. J.

September 4, 1924.

CHRONOLOGICAL TABLE OF ARCHITECTURAL EXAMPLES

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Buildings that no longer exist are in italics.

Greek, Byzantine, and Romanesque Period

Greek.	Byzantine.	Italian and Italo-Byzantine.	French.	English.
c. 1100 B.C. Treasury of Atreus. Gate of Lions at Mycenae. 650 B.C. Doric temple at Corinth. 626 B.C. Temple of Selinus. 470–409 B.C. "Great Period", Pheidias, etc.		A.D. 300–305. Spalato. Diocletian's palace. Classic, with many irregularities. 312. Constantine's triumphal arch in regular classic. Debased sculpture. 313. Edict of Milan. Toleration of Christianity.		
	324. Foundation of Constantinople. Church at Bethlehem.	330. *S. Peter's, Rome, built by Constantine. A Basilica.* 335. S. Costanza, Rome, built as tomb house for Princess Constantia.		
	350–60. S. Giorgio, Salonica, a round church, domed, with mosaics. 379. Constantinople. Theodosius I.'s pedestal to the obelisk of Thothmes III. with sculptures in tolerable classic style.			

		380. S. Paolo f. le Mura, Rome, rebuilt on present plan. Burnt 1823 and since rebuilt.		
				c. 400. Church at Silchester. Foundations exist.
		404. RAVENNA MADE THE CAPITAL.		
		410. SACK OF ROME BY ALARIC.		
	425. Eski Djouma, Salonica. Basilica, columns with pulvino, mosaic in arches, etc.	425. Baptistery, Ravenna. Mosaics added by Archbp. Neon.		
			431–*c.* 485. *Sidonius Apollinaris mentions a large church at Lyons built by Bp. Patiens.*	
		432. S. Maria Maggiore, Rome, rebuilt by Sixtus III.		
				449. English invasion.
		450. Death of Galla Placidia. Her mausoleum at Ravenna.		
			472. Church of S. Martin in Tours built by Bp. Perpetuus.	
		476. ODOACER. END OF WESTERN ROMAN EMPIRE.		
		493–526. THEODERIC and Ostrogothic kingdom. S. Apollinare Nuovo, Ravenna.		
	495. Salonica. S. Sophia, domed church on square plan.			
			496. CONVERSION OF CLOVIS.	
	515. Ezra in Syria. Domed church and stone roof.			
				520. Battle of Mount Badon. Saxon advance checked.
		526. Death of Theoderic. His mausoleum, S. Vitale, Ravenna, begun.		
	527. JUSTINIAN, EMPEROR, Constantinople. SS. Sergius and Bacchus finished by Justinian, begun in reign of his uncle Justin I.			

BYZANTINE.	ITALIAN.	GERMAN.	FRENCH.	ENGLISH.
532–7. Constantinople. S. Sophia built by Justinian. S. Irene rebuilt by him (but *v.* 740).	534. S. Apollinare in Classe, Ravenna.			
	539. THE EXARCHATE. Ravenna taken by Belisarius.			
563. Constantinople. S. Sophia reconstructed after fall in 558 and rebuilding of dome.	547. S. Vitale, Ravenna, consecrated.			
	568. THE LOMBARD KINGDOM.			564. Gildas's History.
585. Salonica. S. Demetrius.				597. LANDING OF AUGUSTINE in Kent. Ancient churches at Canterbury restored and used again.
	625. Rome. S. Agnese rebuilt by Honorius I. with galleries.			627. *York. King Edwin's church of wood.*
				635. *Winchester Cathedral rebuilt.*
				639. *York. A stone church by King Edwin and Paulinus.*
				652. *Lindisfarne by Finan, timber thatched with reeds.*
				c. 670. Reculver.
				670. Crosses at Bewcastle and Ruthwell.
				674. Monkwearmouth Church by Benedict Biscop, of stone, with glazed windows and paintings.
			682–96. Temple de S. Jean, Poitiers, built by Bp. Ansoaldus over a Roman structure. Altered afterwards, *v.* 1018.	682. Jarrow by Biscop.
				705. Bradford-on-Avon, founded by Adhelm.

726. ICONOCLASTIC EDICT of Leo III., the Isaurian.

740. Constantinople. S. Irene restored or rebuilt after an earthquake.

746. Third Council of Constantinople. Image worship condemned.

842. Image worship restored finally by Empress Theodora.

867. BASIL I., EMPEROR.

727. Ravenna taken by Lombards. End of Exarchate.

739. Toscanella. S. Pietro, the nave and eastern part, west end later.

772–95. S. Maria in Cosmedin.

774. CHARLEMAGNE. End of the Lombard kingdom.

789–824. Milan. S. Ambrogio, apse and monk's tower.

822. Rome. S. Prasede rebuilt by Paschal I.

827. Rome. S. Giorgio in Velabro rebuilt by Gregory IV.

864. Torcello Cathedral. The east end, *v.* 1001.

976. Venice. S. Mark's injured by fire. Restored by P. Orseolo with architects from Constantinople.

1001–8. Torcello Cathedral. Nave rebuilt.

1006. Pisa. Duomo begun, *v.* 1067.

774. Lorsch. *The abbey consecrated in presence of Charlemagne.* Existing gatehouse of doubtful date.

796–804. Aix-la-Chapelle. The Dom by Charlemagne, imitating S. Vilate.

820. *S. Gall, Switzerland.*

1016. Worms Cathedral consecrated, remodelled in next century, *v.* 1181.

? Beauvais. The Basse Œuvre, but see 990.

801. Germigny des Près. Byzantine plan, mosaics.

990. Beauvais, foundation of Cathedral by Bp. Hervé.

Le Puy en Velay. The eastern part and one side of the cloisters.

740. Cross of Acca, bishop of Hexham.

c. 800. Deerhurst founded, remodelled in 1056 after damage by Danes.

950. *Canterbury Cathedral restored by Odo.*

? Earls Barton. Strip work decoration.

Byzantine.	Italian.	German.	French.	English.
				1017. Canute King. A general rebuilding of churches followed.
	Milan. S. Ambrogio, nave and atrium.	1037–40. Mainz rebuilt.	1018. Poitiers. S. Jean restored and enlarged.	
		1039. Speyer. The crypt.	1047. Périgueux. S. Front. The Latin church dedicated.	
				1050. Westminster Abbey by Edward the Confessor dedicated 1065.
	1063. Venice. S. Mark's remodelled to its present form by Doge Contarini. Decoration and facing later.			1056. Deerhurst Church rebuilt.
	1067. Pisa. Duomo. Design remodelled with greater splendour after victory over Saracens at Palermo. Consecrated 1118.	1066. Tournay. Nave dedicated.	1066. Caen. Abbaye aux Hommes.	1066. Norman Conquest.
	1071. Venice. Portico of S. Mark's finished.			1077–88. S. Albans by Abbot Paul.
				1079–1103. Winchester by Bp. Walkelyn.
1081. Alexius Comnenus, Emperor.				1081. Ely begun by Abbot Simeon. *d.* 1093.
			1088–99. Toulouse. S. Sernin finished.	
			1089. Cluny. Abbey begun. Consecrated in 1131.	1089–1100. Gloucester. Eastern part. Nave probably *c.* 1130.
			1089–1140. Vézelay. Nave with cross vaults.	
		1093. Laach. Abbey begun. Eastern part of this date, *v.* 1112.		1093. Durham. Choir.
				1096. Norwich Cathedral. Eastern part, *v.* 1121.
				1096–1100. Canterbury. The glorious choir of Ernulf and Conrad.
	1099. Modena. Duomo by Lanfrancus.			1099–1128. Durham. Nave. Christchurch Priory.
			1100. Clermont. Notre Dame du Port.	

1108. Rome. S. Clemente. Upper church by Paschal II.

1112. Laach. Building resumed, not consecrated till 1156.

1115. Rochester. Nave.

1116. Worms dedicated, *v.* 1171.

1118–43. Constantinople. S. Saviour Pantocrator. A triple church, part perhaps older.

1118. Rome. Tower of S. Maria in Cosmedin.

1118. Peterborough. Eastern part.

1119. Cahors. Cathedral.

1120. Périgueux rebuilt after fire on plan of S. Mark's.

1121. Norwich. Nave.

1123. Tewkesbury. Nave.

1124. Castor Church, Northants.

1128–44. Milan. S. Ambrogio. Canon's tower.

1130. Angoulême. Domed nave.

1132. S. Denis. Abbot Suger's building consecrated 1144.

1135. Chartres. West portals (Pointed arches).

? Salonica. The Apostles.

1140. Murano, rebuilt after earthquake of 1117. Outside galleries.

1140. Fountains Abbey. Pointed nave arcade.

1146. Tournay. Transept in lighter Romanesque.

1147. Vienna. The Romanesque west front.

1150–80. Oxford. S. Frideswide.

1152. Arles. S. Trophime.

1153. Pisa. Baptistery begun by Diotisalvi.

1155–93. Peterborough. Transepts and nave.

1156. Laach consecrated.

1163. Paris. Notre Dame, choir.
S. Germain des Près.

1168. Sens Cathedral. Pointed arcade on coupled columns.

1171. Worms Cathedral restored by Conrad II. Bp.

1172. Cologne. Great S. Martin finished.

1173. Pisa. Campanile begun.

1174–91. Wells. Eastern part of nave.

1174–89. Ely. Nave.

1175. Durham. The Galilee.
Worcester. Western bays of nave.

1175–1212. Soissons. South transept.

Byzantine.	Italian.	German.	French.	English.
				1175–78. Canterbury. The choir of William of Sens.
			1180. Loches. Church. Le Puy. Two western bays with porch below.	1177–93. Peterborough. Nave and west transept.
		1181. Worms Cathedral reconstructed after being remodelled.		
	1183. Peace of Constance. Establishment of communal independence.			
	1193. Rome. Cloisters of S. Paolo f. le Mura and of S. Giovanni Laterano.			
1204. Latin Conquest of Constantinople.				
1261. Greek Empire restored. The Palaeologi.				
1303. Constantinople. Kahriyeh Djami, Church of the Chora, restored by Theodore Metochites and decorated with mosaic.				
c. 1340. Lesnovo, Serbia. *Byzantine.*				

FRANCE.	ENGLAND.	ITALY.
	1179–84. Canterbury. The Eastern part by English William. *Thoroughly developed Pointed.*	
	1185. Temple Church, London. The Rotunda consecrated. *Pointed and round arches mixed.*	
1194. Chartres. Rebuilding begun after a fire.	1192. Lincoln. S. Hugh's choir and apse. Vault later. *Developed Early English.*	
1198–1206. Vézelay. Choir and transepts. *Transitional Gothic.*		
	1200–22. Peterborough. W. front. *Early English.*	
	1204. Winchester. Bp. de Lucy's retro-choir. *Early English.*	1204. Lucca Duomo. West front by Guidetto. *Romanesque.*
1211. Reims Cath. Rebuilding begun after a fire. Choir occupied 1241. *Beginning of bar tracery.*		
1218. Paris. Notre Dame. W. front.		1215. Como. The Broletto. *Pointed and round arches.*
1220. Amiens. Nave begun.	1220. Salisbury Cath. begun. *Lancet windows, plate tracery in Triforium.*	
1224. Chartres. The S. porch.		
1231–81. S. Denis. The nave and clerestory. *Glazed Triforium.*		1228. Assisi. Convent of S. Francis begun after his death in 1226 (*v.* 1253).
1245–48. Paris. S. Chapelle.	1235–51. Ely. East end and presbytery.	
c. 1250. Reims. Nave except W. end.	1245–69. Westminster Abbey. Henry III.'s choir and transepts. *Bar tracery.*	
		1253. Assisi. The upper church.
	1255–80. Lincoln. Angel choir.	
		1260. Pisa. Baptistery pulpit by Nicola Pisano.
		1267. Siena Cathedral consecrated.
	1270. York. S. Mary's Abbey begun.	
1280. Rouen. Portail des Libraires. Late geometrical.		
		1284. Siena. West front by Giov. Pisano.
	1291–1324. York Cathedral. Nave. *Late geometrical decorated.*	1290. Orvieto Cathedral begun, finished in 1330.
1296. Paris. Notre Dame. Chapels between the choir buttresses.	1293–1302. Wells Chapter-house. *Beginning of curvilinear.*	
1302. Rouen Cathedral. Lady Chapel. *Geometrical.*		1298. Florence. Cathedral by Arnolfo di Cambio.

FRANCE.	ENGLAND.	ITALY.
1308. CAEN. Tower of S. Pierre. *Geometrical.*		
1318–39. Rouen. S. Ouen. E. end. *Late geometrical.*	*c.* 1320. WINCHESTER CATHEDRAL. Feretory screen. *Curvilinear.*	1320. Lucca Cathedral. Apse. *Romanesque.*
	1320–27. Oxford. The old Congregation House and Bishop Cobham's Library.	
	1321–49. ELY. Lady Chapel. *Curvilinear.*	
	1327–42. Ely. The Octagon. *Curvilinear.*	1325–45. SIENA. Tower of the Commune.
	1328. S. David's. Bishop Gower's palace, screen and tomb.	1328. Milan. Tower of S. Gotardo by Pecorari. *Round arched.*
	1330. Gloucester. Abbot Wygmote's S. transept. *Early Perpendicular.*	
	1331. Salisbury. Tower and spire begun.	
	1335–40. Southwell. Choir screen.	1334. Florence. Giotto's Campanile. Finished by Taddeo Gaddi.
	1337–50. Gloucester. Remodelling of choir in *Perpendicular* style.	
1346. BATTLE OF CRECY.	1345. Winchester. Bp. Edington's west front. *Perpendicular.*	
1348. THE PLAGUE.	1348. THE BLACK DEATH.	1348. THE PLAGUE.
	1350–1420. Westminster. Seven western bays following thirteenth-century design.	
1356. BATTLE OF POITIERS.	1351–77. Gloucester. E. end and part of cloister. *Perpendicular.*	
	c. 1365. Beverley. The Percy Tomb. *Curvilinear.*	1370. Chiaravalle. Central cupola and tower.
1371–86. Coutances. Side chapels of nave. *Geometrical.*		
1375. Amiens. Side chapels of nave. *Geometrical.*	1378–1410. Canterbury. Nave. *Perpendicular.*	
1379. Poitiers Cathedral. West front finished.		
	1385. Wells. S.W. tower begun by Bp. Harewell.	1387. Milan. Cathedral begun.
	1394–*c.* 1450. Winchester. Nave remodelled by William of Wykeham and his successors. *Perpendicular.*	
	1394–98. Westminster Hall remodelled with new roof.	1396. Certosa of Pavia.
1415. BATTLE OF AGINCOURT.	1412. Gloucester. Cloister finished.	
		1420. Florence. Brunelleschi's cupola begun. *Coming of the Renaissance.*

1426. Caudebec. Nave, façade and spire later *flamboyant.*

1432–1500. Rouen. S. Maclou. *Flamboyant. Continuous mouldings in arcade.*

1443. Bourges. Jacques Cœur's house. *Flamboyant.*

1456. EXPULSION OF ENGLISH.
1481–92. Rouen Cathedral. Tour de Beurre.

1490. Rouen. S. Ouen. Nave.

1500–48. Beauvais Cathedral. South transept.
Senlis. South transept.

1509–30. Rouen Cathedral. West front.

1427–80. Oxford Divinity School. Duke Humphrey's Library.
1432. York. Western towers.

1438. Peterborough. Eastern aisle. *Fan vault.*

1447. Cambridge. King's College Chapel begun.
1454. Gloucester. Central tower.

1490. Oxford. S. Mary. The Nave.

1492. Oxford. Magdalen Tower.
1495. Canterbury. Central tower.
1496–1525. Bath Abbey, rebuilt by Bp. King and Prior Bird. Not finished till 1616.
1502. Westminster. Henry VII.'s Chapel begun.

1424. Venice. Ducal palace. The Piazzetta front by Giovanni and Bartolommeo Bon. *Following the older design.*
1430. Venice. The Ca d' Oro by Giovanni and Bartolommeo Bon.

1440. Venice. Porta della Carta by Bon.

1450. Rimini Cathedral remodelled by Alberti in semi-classic.

1481. Venice. Palazzo Vendramin Calergi by Pietro Lombardo. *Mixed style of Gothic and Classic.*
1486. Vitruvius first published.
1490. Venice. Inner Court of Ducal Palace. *Mixed Gothic and Classic.*
1490–1522. Milan Cathedral. The cupola by Omodei, etc.

THE RENAISSANCE PERIOD

1507. Tours. Top of Cathedral towers. *Early Renaissance.*

1514. Chartres. Choir screen by Texier. *Gothic first and then Renaissance.*

FRANÇOIS I., 1515–47

1515. Blois. North wing and staircase. Chenonceaux. Main block, *v.* 1556.

HENRY VIII., 1509–47

1511. Westminster. Torrigiano's contract for tomb of Lady Margaret. *Italian Renaissance.*
1512. Cambridge, King's College, contract for the fan vault, finished 1552.
Westminster. Torrigiano's contract for Henry VII.'s tomb.

1515–20. Hampton Court. First Court by Cardinal Wolsey, finished 1520. Wolsey's Palace finished and surrendered to the King 1526.

1506. Foundation of new S. Peter's by Bramante.
1509. Rome. Villa Farnesina by Peruzzi.

FRANCE.	ENGLAND.	ITALY.
1516–24. Azay-le-Rideau. 1517. Paris. S. Etienne du Mont. Choir. *Gothic.* 1517–31. S. Denis. Tomb of Louis XII. by Jean Juste. *Italian Renaissance.* 1519. Chambord begun. 1520–25. Rouen. Tomb of Cardinal d'Amboise. Hôtel de Bougtherould. Renaissance wing.	1520–25. Layer Marney Tower. *Late Gothic with Italian detail in terra-cotta.* 1521. Sutton Place. Brick and terra-cotta. *Gothic with Italian details.*	1523–29. Michel-Angelo; Sagrestia nuova at S. Lorenzo for the monuments of Lorenzo and Giuliano de' Medici.
1525. Battle of Pavia.	1525. Oxford. Christchurch Hall for Cardinal Wolsey. *Gothic.* Winchester. Italian mortuary chests on choir screens.	1525. Rome. Palazzo Ossoli by Peruzzi.
1526. Return of Francis. Treaty of Madrid.	1526. Holbein in London. Died of the plague in London in 1543.	
1528. Fontainebleau. Work begun.	1530–36. Hampton Court. The Hall by Henry VIII. *Gothic. Pendants of roof Renaissance.*	1530–34. Rome. Farnese Palace by Ant. San Gallo, jr.; cornice by Michel-Angelo.
1532. S. Eustache begun.	1533. Ely. Bishop West's chapel. *Gothic with Italian details.*	
1538–60. S. Etienne du Mont. Nave, *v.* 1601.	1539. *Nonsuch Palace. Gothic with Italian details and figures in stucco.*	1536. Venice. Library by Sansovino.
1540–45. Benvenuto Cellini in France.		
1547. Paris. The Louvre. Appointment of Lescot. Translation of Vitruvius into French.		1541. Venice. The Logetta of the Campanile by Sansovino. 1547. Caprarolo. Palazzo by Vignola.
HENRI II., 1547–59		
1547. Philibert de l'Orme appointed King's Architect. 1548–53. Anet by Philibert de l'Orme.		
	EDWARD VI., 1547–53. MARY, 1553–58	1549. Vicenza. Portico to Pal della Ragione by Palladio, finished 1614.
1550. Paris. Louvre. Goujon's Fontaine des Innocents. 1552. S. Denis. Tomb of Francis I. by De l'Orme. Contract with Bontemps the sculptor.	1550. John Shute sent to Italy by the Duke of Northumberland.	1550. Venice. Scuola di S. Rocco. Front by Scarpagnino (palace begun 1517).

1556. Chenonceaux. De l'Orme's bridge. Finished 1570.

1559. Primaticcio appointed King's Architect.
1560. Chantilly. The Châtelet by Bullant.

CHARLES IX., 1560–74

1562. Jean Goujon's disappearance. Died at Bologna 1568.

1564. Paris. Tuileries. Philibert de l'Orme.

1570. Death of Philibert de l'Orme, also of Primaticcio.

HENRI III., 1574–89

1576. Du Cerceau. 1st vol. of *Les plus excellens bastiments en France.*

1579. Du Cerceau. 2nd vol. of *Les plus excellens bastiments en France.*

HENRI IV., 1589–1610

1594–1600. Paris. Louvre. Upper part of Petite Galerie and adjoining part of Grande Galerie.
1600. Paris. Louvre. Completion of the Grande Galerie to the Tuileries.
1601. Orleans. The new Cathedral. *Gothic.*
Paris. S. Etienne du Mont. The Jubé by Biard.
1604. Paris. Pont Neuf completed.
Place Royale, now des Vosges.

1556–64. Burghley House. East side, with hall and vaulted kitchen on old foundation, *v.* 1577.

ELIZABETH, 1558–1603

1559. Little Moreton Hall. Half timber.

1562–72. London. Middle Temple Hall. *Elizabethan, mixed style.*
1563. Theobalds for Lord Burghley.

1566. London. *Royal Exchange by Sir Thomas Gresham from design by Henry de Pas of Antwerp. Flemish Renaissance.*
1567–79. Longleat for Sir John Thynne.
1570–75. Kirby House, Northants, for Sir Humphrey Stafford.
1573. Inigo Jones born.

1576. Hardwick Hall for Elizabeth, Countess of Shrewsbury.
1577. Burghley House. Three sides of court and west entrance. Clock tower dated 1585. North entrance 1587. *v.* 1556.

1580. Montacute House for Sir Edward Philips.
Wollaton Hall for Sir Francis Willoughby, by R. Smythson.

1593. Rushton Hall. Triangular lodge by Sir Thomas Tresham.

JAMES I., 1603–25

1603. Audley End.

1563. Rome. Capitol. Palace of the Senator. Michel-Angelo. Finished with changes after his death.

1580. Death of Palladio.

1588–90. Rome. S. Peter's. Michel-Angelo's dome built by Giacomo della Porta.
1590. Rome. Borghesi Palace. Martino Langhi the elder.

FRANCE.	ENGLAND.	ITALY.
c. 1604. Fontainebleau. The Porte Dauphine or Baptistère. Galerie des Cerfs and Court of Offices.	1605. Knole, Kent. Enlarged and remodelled by Thomas Sackville, Earl of Dorset, and Lord High Treasurer.	
	1608. Oxford. Merton College new quadrangle.	1606. Rome. Prolongation of S. Peter's determined on. Finished by Carlo Maderno in 1614.
	1608–11. Hatfield House.	
	1610–13. Oxford. Wadham College.	
	c. 1610. Wimbledon. Eagle House.	
LOUIS XIII., 1610–43	1613. Inigo Jones's second visit to Italy. Oxford. Quadrangle of old schools and Bodleian Library.	
1616–21. Paris. Façade of S. Gervais by De Brosse.	1616. Bath Abbey finished. *Gothic.*	
c. 1616. Church of L'Oratoire by Lemercier.		
	1617. Lincoln's Inn Chapel by Inigo Jones. *Gothic.*	
	1619. London. Banqueting Hall by Inigo Jones. *Pure Palladian Renaissance.*	
1624. Versailles. Cour de Marbre.		1624–30. Barberini Palace. Carlo Maderno, Borromini, and Bernini.
	CHARLES I., 1625–49	
	1625–30. Rushton Hall. Front cloister staircase., etc., added by the Cockaynes.	
	1626. York Stairs by Nicholas Stone (? design of Inigo Jones).	
1629. Paris. Palais Royal (Hôtel de Richelieu) by Lemercier.		
	1630. Fan tracery ceiling to stairs at Christchurch. *Gothic.*	
	1631–40. London. *St. Paul's west front by Inigo Jones.*	
	1632. Birth of Christopher Wren.	1632. Venice. La Salute by Baldassare Longhena.
1634. Cheverny, near Blois.		
1635. Blois. Wing for Gaston d'Orleans by Fr. Mansart.		
	1637. Oxford. St. Mary's Church. South porch by Nicholas Stone.	
1642. Maisons by Fr. Mansart.	1638. Winchester. Cathedral choir screen by Inigo Jones.	
LOUIS XIV., 1643–1716		
	COMMONWEALTH, 1649–60	
1645. Paris. Val-de-Grâce founded. Fr. Mansart's plans carried on by Lemercier.	1652. Death of Inigo Jones.	

1653. Paris. The Louvre. River front and completion of court by Le Vau.
Vaux le Vicomte by Le Vau.

1655–67. Rome. Colonnades of S. Peter's by Bernini.

1656. Oxford. Brasenose College Chapel, consecrated 1666. *Gothic mixed with Classic.*
1659. Cambridge. Pembroke College. South side of second court.

1661–71. Versailles. Middle block surrounding that of De Brosse, by Le Vau.

CHARLES II., 1660–85

1663. Cambridge. Pembroke College Chapel by Christopher Wren.

1665–70. Paris. Louvre. Perrault's east front.
1666. Death of François Mansart.

1675. London. S. Paul's. First stone laid.
1676. Cambridge. Trinity College Library.

1678–1710. Versailles. Side wings and Galerie des Glaces. J. H. Mansart.

1680. Venice. S. Maria Zobenigo by Sardi. *Baroco.*

1682. Oxford. Tom Tower by Wren.

WILLIAM AND MARY, 1689–1702

1689–1700. Hampton Court. Fountain Court by Wren.

1699. Versailles. Chapel by J. H. Mansart, finished after his death.

1701. Castle Howard by Vanbrugh.

1708. Death of J. H. Mansart.

ANNE, 1702–14

1710. London. S. Paul's. Top stone of lantern fixed.
1711. Oxford. Clarendon building by Hawksmoor.

LOUIS XV., 1715–74

GEORGE I., 1714–27

1714. S. Mary-le-Strand by James Gibbs.

1717. Blois. The bridge by J. J. Gabriel.
1719. Chantilly. Stables by Aubert.

1722. Cambridge. Senate house by Gibbs.
1723. Death of Sir Christopher Wren.
1725. Bath. John Wood's plans for laying out the city.
Eton College Library.

1733–45. Paris. S. Sulpice. Façade by Servandoni. Towers later.
1736. Paris. S. Roch. Façade by Robert de Cotte.

GEORGE II., 1727–60

1737–47. Radcliffe Library by Gibbs.
1739–53. Mansion House by G. Dance the elder.

1742. Death of J. J. Gabriel.

FRANCE.	ENGLAND.	ITALY.
	1750. Horace Walpole at Strawberry Hill. *Neo-Gothic.*	
1757. Paris. Place de la Concorde by A. J. Gabriel.		
	GEORGE III., 1760–1820	
	1760. London. Admiralty screen by R. Adam.	
1762–68. Versailles. Petit Trianon by A. J. Gabriel.	1762. Stuart's *Athens.* Vol. I. published.	
1764. Paris. Pantheon by Soufflot. First stone laid. Finished in 1790 after his death in 1780.		
	1768. Royal Academy of Arts founded.	
	1770–82. London. *Newgate prison by G. Dance the younger.*	
1772. Paris. S. Eustache. New west front by Desproux.		
	1776. London. Somerset House begun by Sir William Chambers, R.A.	
	1788. Oxford. Oriel College Library by James Wyatt.	
	1801. Cambridge. Downing College by Wilkins.	
	GEORGE IV., 1820–30	
	1823–27. Cambridge. Corpus Christi buildings by Wilkins. *Neo-Gothic.*	
1824–44. Paris. S. Vincent de Paul by Lepère and Hittorf.		

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